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(54) Title: USE OF NEONICODINOIDS ON TRANSGENIC PLANTS

(57) Abstract

There is now described a method of controlling pests with nitroimino- or nitroguanidino-compounds; more specifically a method of controlling pests in and on transgenic crops of useful plants, such as, for example, in crops of maize, cereals, soya beans, tomatoes, cotton, potatoes, rice and mustard, with a nitroimino- or nitroguanidino-compound, especially with thiamethoxam, characterized in that a pestical composition comprising a nitroimino- or nitroguanidino- compound in free form or in agrochemically useful salt form and at least one auxiliary is applied to the pests or their environment, in particular to the crop plant itself.

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USE OF NEONICODINOIDS ON TRANSGENIC PLANTS

The present invention relates to a method of controlling pests with a nitroimino- or nitroguanidino-compound, especially thiamethoxam; more specifically to a novel method of controlling pests in and on transgenic crops of useful plants with a nitroimino- or nitroguanidino-compound.

Certain pest control methods are proposed in the literature. However, these methods are not fully satisfactory in the field of pest control, which is why there is a demand for providing further methods for controlling and combating pests, in particular insects and representatives of the order Acarina, or for protecting plants, especially crop plants. This object is achieved according to the invention by providing the present method.

The present invention therefore relates to a method of controlling pests in crops of transgenic useful plants, such as, for example, in crops of maize, cereals, soya beans, tomatoes, cotton, potatoes, rice and mustard, characterized in that a pesticidal composition comprising a nitroimino- or nitroguanidino-compound, especially thiamethoxam, imidacloprid, Ti-435 or thiacloprid in free form or in agrochemically useful salt form and at least one auxiliary is applied to the pests or their environment, in particular to the crop plant itself; to the use of the composition in question and to propagation material of transgenic plants which has been treated with it.

Surprisingly, it has now emerged that the use of a nitroimino- or nitroguanidino-compound compound for controlling pests on transgenic useful plants which contain - for instance - one or more genes expressing a pesticidally, particularly insecticidally, acaricidally, nematocidally or fugicidally active ingredient, or which are tolerant against herbicides or resistent against the attack of fungi, has a synergistic effect. It is highly surprising that the use of a nitroimino- or nitroguanidino-compound in combination with a transgenic plant exceeds the additive effect, to be expected in principle, on the pests to be controlled and thus extends the range of action of the nitroimino- or nitroguanidino-compound and of the active principle expressed by the transgenic plant in particular in two respects:

In particular, it has been found, surprisingly, that within the scope of invention the pesticidal activity of a nitroimino- or nitroguanidino-compound in combination with the effect expressed by the transgenic useful plant, is not only additive in comparison with the pesticidal activities of the nitroimino- or nitroguanidino-compound alone and of the

transgenic crop plant alone, as can generally be expected, but that a synergistic effect is present. The term "synergistic", however, is in no way to be understood in this connection as being restricted to the pesticidal activity, but the term also refers to other advantageous properties of the method according to the invention compared with the nitroimino- or nitroguanidino-compound and the transgenic useful plant alone. Examples of such advantageous properties which may be mentioned are: extension of the pesticidal spectrum of action to other pests, for example to resistant strains; reduction in the application rate of the nitroimino- or nitroguanidino-compound, or sufficient control of the pests with the aid of the compositions according to the invention even at an application rate of the nitroimino- or nitroguanidino-compound alone and the transgenic useful plant alone are entirely ineffective; enhanced crop safety; improved quality of produce such as higher content of nutrient or oil, better fiber quality, enhanced shelf life, reduced content of toxic products such as mycotoxins, reduced content of residues or unfavorable constituents of any kind or better digestability; improved tolerance to unfavorable temperatures, draughts or salt content of water; enhanced assimilation rates such as nutrient uptake, water uptake and photosynthesis; favorable crop properties such as altered leaf aerea, reduced vegetative growth, increased yields, favorable seed shape/seed thickness or germination properties, altered colonialisation by saprophytes or epiphytes, reduction of senescense, improved phytoalexin production, improved of accelerated ripening, flower set increase, reduced boll fall and shattering, better attraction to beneficials and predators, increased pollination, reduced attraction to birds; or other advantages known to those skilled in the art.

Nitroimino- and nitroguanidino-cpmpounds, such as thiamethoxam (5-(2-Chlorthiazol-5-ylmethyl)-3-methyl-4-nitroimino-perhydro-1,3,5-oxadiazin), are known from EP-A-0'580'553. Within the scope of invention thiamethoxam is preferred.

Also preferred within the scope of invention is imidacloprid of the formula

British Crop Protection Council, London, page 591;

also preferred is Thiacloprid of the formula

EP-A-235'725;

also preferred is the compound of the formula

Ti-435 (Clothiamidin) from EP-A-376'279

The agrochemically compatible salts of the nitroimino- or nitroguanidino-compounds are, for example, acid addition salts of inorganic and organic acids, in particular of hydrochloric acid, hydrobromic acid, sulfuric acid, nitric acid, perchloric acid, phosphoric acid, formic acid, acetic acid, trifluoroacetic acid, oxalic acid, malonic acid, toluenesulfonic acid or benzoic acid. Preferred within the scope of the present invention is a composition known per se which comprises, as active ingredient, thiamethoxam and imidacloprid, each in the free form, especially thiamethoxam.

The transgenic plants used according to the invention are plants, or propagation material thereof, which are transformed by means of recombinant DNA technology in such a way that they are - for instance - capable of synthesizing selectively acting toxins as are known, for example, from toxin-producinginvertebrates, especially of the phylum Arthropoda, as can be obtained from Bacillus thuringiensis strains; or as are known from plants, such as lectins; or in the alternative capable of expressing a herbicidal or fungicidal resistance. Examples of such toxins, or transgenic plants which are capable of synthesizing such toxins, have been disclosed, for example, in EP-A-0 374 753, WO 93/07278, WO 95/34656, EP-A-0 427 529 and EP-A-451 878 and are incorporated by reference in the present application.

The methods for generating such transgenic plants are widely known to those skilled in the art and described, for example, in the publications mentioned above.

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The toxins which can be expressed by such transgenic plants include, for example, toxins, such as proteins which have insecticidal properties and which are expressed by transgenic plants, for example Bacillus cereus proteins or Bacillus popliae proteins; or Bacillus thuringiensis endotoxins (B.t.), such as CrylA(a), CrylA(b), CrylA(c), CrylIA, CrylIIA, CrylIIB2 orCytA; VIP1; VIP2; VIP3; or insecticidal proteins of bacteria colonising nematodes like Photorhabdus spp or Xenorhabdus spp such as Photorhabdus luminescens, Xenorhabdus nematophilus etc.; proteinase inhibitors, such as trypsin inhibitors, serine protease inhibitors, patatin, cystatin, papain inhibitors; ribosome-inactivating proteins (RIP), such as ricin, maize RIP, abrin, luffin, saporin or bryodin; plant lectins such as pea lectins, barley lectins or snowdrop lectins; or agglutinins; toxins produced by animals, such as scorpion toxins, spider venoms, wasp venoms and other insect-specific neurotoxins; steroid metabolism enzymes, such as 3-hydroxysteroid oxidase, ecdysteroid UDP-glycosyl transferase, cholesterol oxidases, ecdysone inhibitors, HMG-COAreductase, ion channel blockers such as sodium and calcium, juvenile hormone esterase, diuretic hormone receptors, stilbene synthase, bibenzyl synthase, chitinases and glucanases.

Examples of known transgenic plants which comprise one or more genes which encode insecticidal resistance and express one or more toxins are the following: KnockOut® (maize), YieldGard® (maize); NuCOTN 33B® (cotton), Bollgard® (cotton), NewLeaf® (potatoes), NatureGard® and Protecta®.

The following tables comprise further examples of targets and principles and crop phenotypes of transgenic crops which show tolerance against pests mainly insects, mites, nematodes, virus, bacteria and diseases or are tolerant to specific herbicides or classes of herbicides.

Table A1: Crop: Maize

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones

Hydroxyphenylpyruvate dioxygenase (HPPD) Isoxachlortol, Triones such as mesotrione or sulcotrione	Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Anthranilate Synthase Nitrilase S-Enolpyruvyl-3phosphoshikimate Synthase (EPSPS) Glyphosate oxidoreductase Protoporphyrinogen oxidase (PROTOX) Dimboa biosynthesis (Bx1 gene) CMIII (small basic maize seed peptide Corn- SAFP (zeamatin) mesotrione or sulcotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of IMP and Synthesi	Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as isoxaflutol or
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Cytochrome P450 eg. P450 SU1 Cytochrome P450 eg. P450 SU1 Dimboa biosynthesis (Bx1 gene) Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina Corn- SAFP (zeamatin) plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases Glucanases plant pathogenes plant pathogenes plant pathogenes	Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
Cytochrome P450 eg. P450 SU1 Xenobiotics and herbicides such as Sulfonylureas Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. Plant pathogenes eg. fusarium, alternaria, sclerotina Corn- SAFP (zeamatin) Plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases Glucanases Cytochrome P450 eg. P450 SU1 Xenobiotics and herbicides such as Sulfonylureas Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina Cochliobulus Plant pathogenes Plant pathogenes		phenylpyrazoles, pyridin derivatives,
Dimboa biosynthesis (Bx1 gene) Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina Corn- SAFP (zeamatin) plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases Glucanases Sulfonylureas Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina Corhiendulus plant pathogenes plant pathogenes		phenopylate, oxadiazoles etc.
Dimboa biosynthesis (Bx1 gene) Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases Glucanases Helminthosporium turcicum, Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina Cochliobulus plant pathogenes plant pathogenes	Cytochrome P450 eg. P450 SU1	Xenobiotics and herbicides such as
Rhopalosiphum maydis, Diplodia maydis, Ostrinia nubilalis, lepidoptera sp. plant pathogenes eg. fusarium, alternaria, sclerotina Corn- SAFP (zeamatin) plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Cochliobulus Chitinases plant pathogenes Glucanases plant pathogenes		Sulfonylureas
CMIII (small basic maize seed peptide plant pathogenes eg. fusarium, alternaria, sclerotina plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases plant pathogenes plant pathogenes Glucanases plant pathogenes	Dimboa biosynthesis (Bx1 gene)	Helminthosporium turcicum,
CMIII (small basic maize seed peptide plant pathogenes eg. fusarium, alternaria, sclerotina plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Cochliobulus Chitinases plant pathogenes Glucanases plant pathogenes		Rhopalosiphum maydis, Diplodia
alternaria, sclerotina Corn- SAFP (zeamatin) plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases plant pathogenes plant pathogenes plant pathogenes		maydis, Ostrinia nubilalis, lepidoptera sp.
Corn- SAFP (zeamatin) plant pathogenes eg. fusarium, alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Chitinases plant pathogenes plant pathogenes plant pathogenes	CMIII (small basic maize seed peptide	plant pathogenes eg. fusarium,
alternaria, sclerotina, rhizoctonia, chaetomium,phycomyces Hm1 gene Cochliobulus Chitinases plant pathogenes Glucanases plant pathogenes		alternaria, sclerotina
chaetomium,phycomyces Hm1 gene Cochliobulus Chitinases plant pathogenes Glucanases plant pathogenes	Corn- SAFP (zeamatin)	plant pathogenes eg. fusarium,
Hm1 gene Cochliobulus Chitinases plant pathogenes Glucanases plant pathogenes		alternaria, sclerotina, rhizoctonia,
Chitinases plant pathogenes Glucanases plant pathogenes		chaetomium,phycomyces
Glucanases plant pathogenes	Hm1 gene	Cochliobulus
	Chitinases	plant pathogenes
Coat proteins viruses such as maize dwarf mosaic	Glucanases	plant pathogenes
	Coat proteins	viruses such as maize dwarf mosaic

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	virus, maize chlorotic dwarf virus
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, coleoptera, diptera,
Bacillus cereus toxins, Photorabdus and	nematodes, eg. ostrinia nubilalis,
Xenorhabdus toxins	heliothis zea, armyworms eg.
	spodoptera frugiperda, corn rootworms,
	sesamia sp., black cutworm, asian corn
	borer,weevils
3- Hydroxysteroid oxidase	lepidoptera, coleoptera, diptera,
	nematodes, eg. ostrinia nubilalis,
	heliothis zea, armyworms eg.
	spodoptera frugiperda, corn rootworms,
	sesamia sp., black cutworm, asian corn
	borer, weevils
Peroxidase	lepidoptera, coleoptera, diptera,
	nematodes, eg. ostrinia nubilalis,
	heliothis zea, armyworms eg.
	spodoptera frugiperda, corn rootworms,
	sesamia sp., black cutworm, asian com
	borer, weevils
Aminopeptidase inhibitors eg. Leucine	lepidoptera, coleoptera, diptera,
aminopeptidase inhibitor (LAPI)	nematodes, eg. ostrinia nubilalis,
	heliothis zea, armyworms eg.
	spodoptera frugiperda, corn rootworms,
	sesamia sp., black cutworm, asian com
	borer, weevils
Limonene synthase	corn rootworms
Lectines	lepidoptera, coleoptera, diptera,
	nematodes, eg. ostrinia nubilalis,
	heliothis zea, armyworms eg.
	spodoptera frugiperda, corn rootworms,
	sesamia sp., black cutworm, asian corn
	borer, weevils

Protease Inhibitors eg. cystatin, patatin, virgiferin, CPTI ribosome inactivating protein lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spedoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils maize 5C9 polypeptide lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils HMG-CoA reductase lepidoptera, coleoptera, diptera,	Effected target or expressed principle(s)	Crop phenotype / Tolerance to
ribosome inactivating protein lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spedoptera frugiperda, com rootworms, sesamia sp., black cutworm, asian corn borer, weevils lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils	Protease Inhibitors eg. cystatin, patatin,	weevils, corn rootworm
nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spedoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils	virgiferin, CPTI	
heliothis zea, armyworms eg. spedoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils	ribosome inactivating protein	lepidoptera, coleoptera, diptera,
spedoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils		nematodes, eg. ostrinia nubilalis,
sesamia sp., black cutworm, asian corn borer, weevils lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils		heliothis zea, armyworms eg.
borer, weevils lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils		spedoptera frugiperda, corn rootworms,
maize 5C9 polypeptide lepidoptera, coleoptera, diptera, nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils		sesamia sp., black cutworm, asian corn
nematodes, eg. ostrinia nubilalis, heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils		borer, weevils
heliothis zea, armyworms eg. spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils	maize 5C9 polypeptide	lepidoptera, coleoptera, diptera,
spodoptera frugiperda, corn rootworms, sesamia sp., black cutworm, asian corn borer, weevils		nematodes, eg. ostrinia nubilalis,
sesamia sp., black cutworm, asian corn borer, weevils		heliothis zea, armyworms eg.
borer, weevils		spodoptera frugiperda, corn rootworms,
		sesamia sp., black cutworm, asian corn
HMG-CoA reductase lepidoptera, coleoptera, diptera,		borer, weevils
	HMG-CoA reductase	lepidoptera, coleoptera, diptera,
nematodes, eg. ostrinia nubilalis,		nematodes, eg. ostrinia nubilalis,
heliothis zea, armyworms eg.		heliothis zea, armyworms eg.
spodoptera frugiperda, corn rootworms,		spodoptera frugiperda, corn rootworms,
sesamia sp., black cutworm, asian corn		sesamia sp., black cutworm, asian corn
borer, weevils		borer, weevils

Table A2: Crop Wheat

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1	Xenobiotics and herbicides such as
	Sulfonylureas
Antifungal polypeptide AlyAFP	plant pathogenes eg septoria and
	fusarioum
glucose oxidase	plant pathogenes eg. fusarium, septoria
pyrrolnitrin synthesis genes	plant pathogenes eg. fusarium, septoria
serine/threonine kinases	plant pathogenes eg. fusarium, septoria
	and other diseases
Hypersensitive response eliciting	plant pathogenes eg. fusarium, septoria
polypeptide	and other diseases
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	plant pathogenes
Glucanases	plant pathogenes
double stranded ribonuclease	viruses such as BYDV and MSMV
Coat proteins	viruses such as BYDV and MSMV
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, coleoptera, diptera,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Bacillus cereus toxins, Photorabdus and	nematodes,
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, coleoptera, diptera,
	nematodes,
Peroxidase	lepidoptera, coleoptera, diptera,
	nematodes,
Aminopeptidase inhibitors eg. Leucine	lepidoptera, coleoptera, diptera,
aminopeptidase inhibitor	nematodes,
Lectines	lepidoptera, coleoptera, diptera,
	nematodes, aphids
Protease Inhibitors eg. cystatin, patatin,	lepidoptera, coleoptera, diptera,
virgiferin, CPTI	nematodes, aphids
ribosome inactivating protein	lepidoptera, coleoptera, diptera,
	nematodes, aphids
HMG-CoA reductase	lepidoptera, coleoptera, diptera,
	nematodes, eg. ostrinia nubilalis,
	heliothis zea, armyworms eg.
	spodoptera frugiperda, corn rootworms,
	sesamia sp., black cutworm, asian corn
	borer, weevils

Table A3: Crop Barley

reas, Imidazolinones,
yrimidines,
oxybenzoates, Phtalides
enoxyalkanecarboxylic acids,
anediones
s such as isoxaflutol or
rtol, Triones such as
ne or sulcotrione

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1	Xenobiotics and herbicides such as
	Sulfonylureas
Antifungal polypeptide AlyAFP	plant pathogenes eg septoria and
	fusarioum
glucose oxidase	plant pathogenes eg. fusarium, septoria
pyrrolnitrin synthesis genes	plant pathogenes eg. fusarium, septoria
serine/threonine kinases	plant pathogenes eg. fusarium, septoria
	and other diseases
Hypersensitive response eliciting	plant pathogenes eg. fusarium, septoria
polypeptide	and other diseases
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	plant pathogenes
Glucanases	plant pathogenes
double stranded ribonuclease	viruses such as BYDV and MSMV
Coat proteins	viruses such as BYDV and MSMV
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, coleoptera, diptera,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Bacillus cereus toxins, Photorabdus and	nematodes,
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, coleoptera, diptera,
	nematodes,
Peroxidase	lepidoptera, coleoptera, diptera,
	nematodes,
Aminopeptidase inhibitors eg. Leucine	lepidoptera, coleoptera, diptera,
aminopeptidase inhibitor	nematodes,
Lectines	lepidoptera, coleoptera, diptera,
	nematodes, aphids
Protease Inhibitors eg. cystatin, patatin,	lepidoptera, coleoptera, diptera,
virgiferin, CPTI	nematodes, aphids
ribosome inactivating protein	lepidoptera, coleoptera, diptera,
	nematodes, aphids
HMG-CoA reductase	lepidoptera, coleoptera, diptera,
	nematodes, aphids

Table A4: Crop Rice

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1	Xenobiotics and herbicides such as
	Sulfonylureas
Antifungal polypeptide AlyAFP	plant pathogenes
glucose oxidase	plant pathogenes
pyrrolnitrin synthesis genes	plant pathogenes
serine/threonine kinases	plant pathogenes
Phenylalanine ammonia lyase (PAL)	plant pathogenes eg bacterial leaf blight
	and rice blast, inducible
phytoalexins	plant pathogenes eg bacterial leaf blight
	and rice blast
B-1,3-glucanase antisense	plant pathogenes eg bacterial leaf blight
	and rice blast
receptor kinase	plant pathogenes eg bacterial leaf blight
	and rice blast
Hypersensitive response eliciting	plant pathogenes
polypeptide	
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	plant pathogenes eg bacterial leaf blight
	and rice blast
Glucanases	plant pathogenes

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
double stranded ribonuclease	viruses such as BYDV and MSMV
Coat proteins	viruses such as BYDV and MSMV
Bacillus thuringiensis toxins, VIP 3,	lepidoptera eg. stemborer, coleoptera eg
Bacillus cereus toxins, Photorabdus and	rice water weevil, diptera, rice hoppers
Xenorhabdus toxins	eg brown rice hopper
3- Hydroxysteroid oxidase	lepidoptera eg. stemborer, coleoptera eg
	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
Peroxidase	lepidoptera eg. stemborer, coleoptera eg
	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
Aminopeptidase inhibitors eg. Leucine	lepidoptera eg. stemborer, coleoptera eg
aminopeptidase inhibitor	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
Lectines	lepidoptera eg. stemborer, coleoptera eg
	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
Protease Inhibitors,	lepidoptera eg. stemborer, coleoptera eg
	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
ribosome inactivating protein	lepidoptera eg. stemborer, coleoptera eg
	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
HMG-CoA reductase	lepidoptera eg. stemborer, coleoptera eg
	rice water weevil, diptera, rice hoppers
	eg brown rice hopper
	1
-	

Table A5: Crop Soya

Effected target or expressed principle(s) | Crop phenotype / Tolerance to

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
oxalate oxidase	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
glucose oxidase	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
pyrrolnitrin synthesis genes	bacterial and fungal pathogens such as

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	fusarium, sclerotinia, stemrot
serine/threonine kinases	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
phytoalexins	plant pathogenes eg bacterial leaf blight
	and rice blast
B-1,3-glucanase antisense	plant pathogenes eg bacterial leaf blight
	and rice blast
receptor kinase	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
Hypersensitive response eliciting	plant pathogenes
polypeptide	
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
Glucanases	bacterial and fungal pathogens such as
	fusarium, sclerotinia, stemrot
double stranded ribonuclease	viruses such as BPMV and SbMV
Coat proteins	viruses such as BYDV and MSMV
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, coleoptera, aphids
Bacillus cereus toxins, Photorabdus and	
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, coleoptera, aphids
Peroxidase	lepidoptera, coleoptera, aphids
Aminopeptidase inhibitors eg. Leucine	lepidoptera, coleoptera, aphids
aminopeptidase inhibitor	
Lectines	lepidoptera, coleoptera, aphids
·	
Protease Inhibitors eg virgiferin	lepidoptera, coleoptera, aphids

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
ribosome inactivating protein	lepidoptera, coleoptera, aphids
HMG-CoA reductase	lepidoptera, coleoptera, aphids
Barnase	nematodes eg root knot nematodes and cyst nematodes
Cyst nematode hatching stimulus	cyst nematodes
Antifeeding principles	nematodes eg root knot nematodes and cyst nematodes

Table A6: Crop Potatoes

Acetolactate synthase (ALS) Sulfonylureas, Imidazolinones, Triazolopyrimidines, Pyrimidyloxybenzoates, Phtalides AcetylCoA Carboxylase (ACCase) Hydroxyphenylpyruvate dioxygenase (HPPD) Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Nitrilase Sulfonylureas, Imidazolinones, Triazolopyrimidines, Pyrimidyloxybenzoates, Phtalides Anyloxyphenoxyalkanecarboxylic acids, oyclohexanediones Isoxacyloxylanecarboxylic acids, oyclohexanediones Isoxacylosylanecarboxylic acids, oyclohexale allocations Isoxacylosylanecarboxylic acids, oyclohexale a	Effected target or expressed principle(s)	Crop phenotype / Tolerance to
AcetylCoA Carboxylase (ACCase) Aryloxyphenoxyalkanecarboxylic acids, cyclohexanediones Hydroxyphenylpyruvate dioxygenase (HPPD) Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Anthranilate Synthase Nitrilase Pyrimidyloxybenzoates, Phtalides Aryloxyphenoxyalkanecarboxylic acids, cyclohexanediones Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate	Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
AcetylCoA Carboxylase (ACCase) Hydroxyphenylpyruvate dioxygenase (HPPD) Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Aryloxyphenoxyalkanecarboxylic acids, cyclohexanediones Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate		Triazolopyrimidines,
Cyclohexanediones Hydroxyphenylpyruvate dioxygenase (HPPD) Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Nitrilase Cyclohexanediones Isoxacyoles such as Isoxaflutol or Isoxachlortol, Triones such as mesotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate		Pyrimidyloxybenzoates, Phtalides
Hydroxyphenylpyruvate dioxygenase (HPPD) Isoxazoles such as Isoxaflutol or Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Anthranilate Synthase Nitrilase Nitrilase Isoxazoles such as Isoxaflutol or Isoxachlortol, Triones such as mesotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate	AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
(HPPD) Isoxachlortol, Triones such as mesotrione or sulcotrione Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Nitrilase Isoxachlortol, Triones such as mesotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate		cyclohexanediones
Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Nitrilase mesotrione or sulcotrione Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate	Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
Phosphinothricin acetyl transferase O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Nitrilase Phosphinothricin altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate	(HPPD)	Isoxachlortol, Triones such as
O-Methyl transferase Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Altered lignin levels Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate		mesotrione or sulcotrione
Glutamine synthetase Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Slufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl S-Enolpyruvyl-3phosphoshikimate Glufosinate, Bialaphos Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate	Phosphinothricin acetyl transferase	Phosphinothricin
Adenylosuccinate Lyase (ADSL) Adenylosuccinate Synthase Anthranilate Synthase Nitrilase Nitrilase Anthranilate Lyase (ADSL) Inhibitors of IMP and AMP synthesis Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl Glyphosate or sulfosate	O-Methyl transferase	altered lignin levels
Adenylosuccinate Synthase Anthranilate Synthase Inhibitors of adenylosuccinate synthesis Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate	Glutamine synthetase	Glufosinate, Bialaphos
Anthranilate Synthase Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate	Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Nitrilase catabolism 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate	Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate	Anthranilate Synthase	Inhibitors of tryptophan synthesis and
as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate		catabolism
5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate	Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
		as Bromoxynil and loxinyl
Synthase (EPSPS)	5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
	Synthase (EPSPS)	

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Giypnosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sultonylureas
Polyphenol oxidase or Polyphenol	blackspot bruise
oxidase antisense	
Metallothionein	bacterial and fungal pathogens such as
	phytophtora
Ribonuclease	Phytophtora, Verticillium, Rhizoctonia
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens such as
	phytophtora
oxalate oxidase	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
glucose oxidase	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
pyrrolnitrin synthesis genes	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
serine/threonine kinases	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
Cecropin B	bacteria such as corynebacterium
	sepedonicum, Erwinia carotovora
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
phytoalexins	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
B-1,3-glucanase antisense	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
receptor kinase	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Hypersensitive response eliciting	bacterial and fungal pathogens such as
polypeptide	Phytophtora, Verticillium, Rhizoctonia
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	bacterial and fungal pathogens such as
	Phytophtora, Verticiilium, Rhizoctonia
Barnase	bacterial and fungal pathogens such as
	Phytophtora, Verticillium,
	Rhizoctonia
Disease resistance response gene 49	bacterial and fungal pathogens such as
	Phytophtora, Verticillium,
	Rhizoctonia
trans aldolase antisense	blackspots
Glucanases	bacterial and fungal pathogens such as
	Phytophtora, Verticillium, Rhizoctonia
double stranded ribonuclease	viruses such as PLRV, PVY and TRV
Coat proteins	viruses such as PLRV, PVY and TRV
17kDa or 60 kDa protein	viruses such as PLRV, PVY and TRV
Nuclear inclusion proteins eg. a or b	viruses such as PLRV, PVY and TRV
Pseudoubiquitin	viruses such as PLRV, PVY and TRV
Replicase	viruses such as PLRV, PVY and TRV
Bacillus thuringiensis toxins, VIP 3,	coleoptera eg colorado potato beetle,
Bacillus cereus toxins, Photorabdus and	aphids
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	coleoptera eg colorado potato beetle,
	aphids
Peroxidase	coleoptera eg colorado potato beetle,
	aphids
Aminopeptidase inhibitors eg. Leucine	coleoptera eg colorado potato beetle,
aminopeptidase inhibitor	aphids
stilbene synthase	coleoptera eg colorado potato beetle,
	aphids
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Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Lectines	coleoptera eg colorado potato beetle,
	aphids
Protease Inhibitors eg cystatin, patatin	coleoptera eg colorado potato beetle,
	aphids
ribosome inactivating protein	coleoptera eg colorado potato beetle,
	aphids
HMG-CoA reductase	coleoptera eg colorado potato beetle,
	aphids
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
Antifeeding principles	nematodes eg root knot nematodes and
	cyst nematodes

Table A7: Crop Tomatoes

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
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Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	blackspot bruise
oxidase antisense	
Metallothionein	bacterial and fungal pathogens such as
	phytophtora
Ribonuclease	Phytophtora, Verticillium, Rhizoctonia
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
oxalate oxidase	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
glucose oxidase	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
pyrrolnitrin synthesis genes	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	etc.
serine/threonine kinases	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Cecropin B	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	leaf mould
Osmotin	alternaria solani
Alpha Hordothionin	bacteria
Systemin	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Polygalacturonase inhibitors	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Prf regulatory gene	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
12 Fusarium resistance locus	fusarium
phytoalexins	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	etc.
B-1,3-glucanase antisense	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
receptor kinase	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Hypersensitive response eliciting	bacterial and fungal pathogens such as
polypeptide	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
Barnase	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft
	rot, powdery mildew, crown rot,
	leaf mould etc.
Glucanases	bacterial and fungal pathogens such as
	bacterial speck, fusarium, soft rot,
	powdery mildew, crown rot, leaf mould
	etc.
double stranded ribonuclease	viruses such as PLRV, PVY and ToMoV
Coat proteins	viruses such as PLRV, PVY and ToMoV
17kDa or 60 kDa protein	viruses such as PLRV, PVY and ToMoV
Nuclear inclusion proteins eg. a or b or	viruses such as PLRV, PVY and ToMoV
	The state of the s

Acetolactate synthase (ALS)

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Nucleoprotein	TRV
Pseudoubiquitin	viruses such as PLRV, PVY and ToMoV
Replicase	viruses such as PLRV, PVY and ToMoV
Bacillus thuringiensis toxins, VIP 3,	lepidoptera eg heliothis, whiteflies
Bacillus cereus toxins, Photorabdus and	aphids
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera eg heliothis, whiteflies aphids
Peroxidase	lepidoptera eg heliothis, whiteflies
	aphids
Aminopeptidase inhibitors eg. Leucine	l lepidoptera eg heliothis, whiteflies
aminopeptidase inhibitor	aphids
Lectines	lepidoptera eg heliothis, whiteflies
	aphids
Protease Inhibitors eg cystatin, patatin	lepidoptera eg heliothis, whiteflies
	aphids
ribosome inactivating protein	lepidoptera eg heliothis, whiteflies
	aphids
stilbene synthase	lepidoptera eg heliothis, whiteflies
	aphids
HMG-CoA reductase	lepidoptera eg heliothis, whiteflies
	aphids
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
Antifeeding principles	nematodes eg root knot nematodes and
	cyst nematodes
Table A8: Crop Peppers	
Effected target or expressed principle(s)	Crop phenotype / Tolerance to

Sulfonylureas, Imidazolinones,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	isoxazoles such as isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial and fungal pathogens
oxidase antisense	
Metallothionein	bacterial and fungal pathogens
Ribonuclease	bacterial and fungal pathogens
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens
oxalate oxidase	bacterial and fungal pathogens
glucose oxidase	bacterial and fungal pathogens
pyrrolnitrin synthesis genes	bacterial and fungal pathogens

Effected target or expressed principle(s) Crop phenotype / Tolerance to serine/threonine kinases bacterial and fungal pathogens Cecropin B bacterial and fungal pathogens rot, leaf mould etc. Phenylalanine ammonia lyase (PAL) bacterial and fungal pathogens Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial and fungai pathogens Osmotin bacterial and fungal pathogens Alpha Hordothionin bacterial and fungal pathogens Systemin bacterial and fungal pathogens Polygalacturonase inhibitors bacterial and fungal pathogens Prf regulatory gene bacterial and fungal pathogens 12 Fusarium resistance locus fusarium phytoalexins bacterial and fungal pathogens B-1,3-glucanase antisense bacterial and fungal pathogens receptor kinase bacterial and fungal pathogens Hypersensitive response eliciting bacterial and fungal pathogens polypeptide Systemic acquires resistance (SAR) viral, bacterial, fungal, nematodal genes pathogens Chitinases bacterial and fungal pathogens Barnase bacterial and fungal pathogens Glucanases bacterial and fungal pathogens double stranded ribonuclease viruses such as CMV, TEV Coat proteins viruses such as CMV, TEV 17kDa or 60 kDa protein viruses such as CMV, TEV Nuclear inclusion proteins eg. a or b or viruses such as CMV, TEV Nucleoprotein Pseudoubiquitin viruses such as CMV, TEV Replicase viruses such as CMV, TEV Bacillus thuringiensis toxins, VIP 3, lepidoptera, whiteflies aphids

Bacillus cereus toxins, Photorabdus and

Xenorhabdus toxins

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
3- Hydroxysteroid oxidase	lepidoptera, whiteflies aphids
Peroxidase	lepidoptera, whiteflies aphids
Aminopeptidase inhibitors eg. Leucine	lepidoptera, whiteflies aphids
aminopeptidase inhibitor	
Lectines	lepidoptera, whiteflies aphids
Protease Inhibitors eg cystatin, patatin	lepidoptera, whiteflies aphids
ribosome inactivating protein	lepidoptera, whiteflies aphids
stilbene synthase	lepidoptera, whiteflies aphids
HMG-CoA reductase	lepidoptera, whiteflies aphids
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
Antifeeding principles	nematodes eg root knot nematodes and
	cyst nematodes
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Table A9: Crop Grapes

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial and fungal pathogens like
oxidase antisense	Botrytis and powdery mildew
Metallothionein	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Ribonuclease	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens like
	Botrytis and powdery mildew
oxalate oxidase	bacterial and fungal pathogens like
	Botrytis and powdery mildew
glucose oxidase	bacterial and fungal pathogens like
	Botrytis and powdery mildew
pyrrolnitrin synthesis genes	bacterial and fungal pathogens like
	Botrytis and powdery mildew
serine/threonine kinases	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Cecropin B	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial and fungal pathogens like

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	Botrytis and powdery mildew
Osmotin	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Alpha Hordothionin	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Systemin	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Polygalacturonase inhibitors	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Prf regulatory gene	bacterial and fungal pathogens like
	Botrytis and powdery mildew
phytoalexins	bacterial and fungal pathogens like
	Botrytis and powdery mildew
B-1,3-glucanase antisense	bacterial and fungal pathogens like
	Botrytis and powdery mildew
receptor kinase	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Hypersensitive response eliciting	bacterial and fungal pathogens like
polypeptide	Botrytis and powdery mildew
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Barnase	bacterial and fungal pathogens like
	Botrytis and powdery mildew
Glucanases	bacterial and fungal pathogens like
	Botrytis and powdery mildew
double stranded ribonuclease	viruses
Coat proteins	viruses
17kDa or 60 kDa protein	viruses
Nuclear inclusion proteins eg. a or b or	viruses
	•

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Nucleoprotein	
Pseudoubiquitin	viruses
Replicase	viruses
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids
Bacillus cereus toxins, Photorabdus and	
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, aphids
Peroxidase	lepidoptera, aphids
Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids
aminopeptidase inhibitor	
Lectines	lepidoptera, aphids
Protease Inhibitors eg cystatin, patatin	lepidoptera, aphids
ribosome inactivating protein	lepidoptera, aphids
stilbene synthase	lepidoptera, aphids, diseases
HMG-CoA reductase	lepidoptera, aphids
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes or general diseases
CBI	root knot nematodes
Antifeeding principles	nematodes eg root knot nematodes or
	root cyst nematodes
	I

Table A10: crop Oil Seed rape

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial and fungal pathogens like
oxidase antisense	Cylindrosporium, Phoma, Sclerotinia
Metallothionein	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Ribonuclease	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
oxalate oxidase	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
glucose oxidase	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
pyrrolnitrin synthesis genes	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
serine/threonine kinases	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Cecropin B	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Scierotinia
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Osmotin	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Alpha Hordothionin	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Systemin	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Polygalacturonase inhibitors	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Prf regulatory gene	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
phytoalexins	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
B-1,3-glucanase antisense	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
receptor kinase	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Hypersensitive response eliciting	bacterial and fungal pathogens like
polypeptide	Cylindrosporium, Phoma, Sclerotinia
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
Barnase	bacterial and fungal pathogens like
	Cylindrosporium, Phoma,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	Sclerotinia, nematodes
Glucanases	bacterial and fungal pathogens like
	Cylindrosporium, Phoma, Sclerotinia
double stranded ribonuclease	viruses
Coat proteins	viruses
17kDa or 60 kDa protein	viruses
Nuclear inclusion proteins eg. a or b or	viruses
Nucleoprotein	
Pseudoubiquitin	viruses
Replicase	viruses
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids
Bacillus cereus toxins, Photorabdus and	
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, aphids
Peroxidase	lepidoptera, aphids
Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids
aminopeptidase inhibitor	
Lectines	lepidoptera, aphids
Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids
CPTI	
ribosome inactivating protein	lepidoptera, aphids
stilbene synthase	lepidoptera, aphids, diseases
HMG-CoA reductase	lepidoptera, aphids
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
CBI	root knot nematodes
Antifeeding principles induced at a	nematodes eg root knot nematodes, root
nematode feeding site	cyst nematodes

Table A11: Crop Brassica vegetable (cabbage, brussel sprouts, broccoli etc.)

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial and fungal pathogens
oxidase antisense	
Metallothionein	bacterial and fungal pathogens
Ribonuclease	bacterial and fungal pathogens
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens
oxalate oxidase	bacterial and fungal pathogens
glucose oxidase	bacterial and fungal pathogens
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Effected target or expressed principle(s)	Crop phenotype / Tolerance to
pyrrolnitrin synthesis genes	bacterial and fungal pathogens
serine/threonine kinases	bacterial and fungal pathogens
Cecropin B	bacterial and fungal pathogens
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial and fungal pathogens
Osmotin	bacterial and fungal pathogens
Alpha Hordothionin	bacterial and fungal pathogens
Systemin	bacterial and fungal pathogens
Polygalacturonase inhibitors	bacterial and fungal pathogens
Prf regulatory gene	bacterial and fungal pathogens
phytoalexins	bacterial and fungal pathogens
B-1,3-glucanase antisense	bacterial and fungal pathogens
receptor kinase	bacterial and fungal pathogens
Hypersensitive response eliciting	bacterial and fungal pathogens
polypeptide	
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Chitinases	bacterial and fungal pathogens
Barnase	bacterial and fungal pathogens
Glucanases	bacterial and fungal pathogens
double stranded ribonuclease	viruses
Coat proteins	viruses
17kDa or 60 kDa protein	viruses
Nuclear inclusion proteins eg. a or b or	viruses
Nucleoprotein	
Pseudoubiquitin	viruses
Replicase	viruses
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids
Bacillus cereus toxins, Photorabdus and	
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, aphids
Peroxidase	lepidoptera, aphids

Crop phenotype / Tolerance to
lepidoptera, aphids
lepidoptera, aphids
lepidoptera, aphids
lepidoptera, aphids
lepidoptera, aphids, diseases
lepidoptera, aphids
cyst nematodes
nematodes eg root knot nematodes and
cyst nematodes
root knot nematodes
nematodes eg root knot nematodes, root
cyst nematodes

Table A12 : Crop Pome fruits eg apples, pears

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	isoxazoles such as isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	1

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial and fungal pathogens like
oxidase antisense	apple scab or fireblight
Metallothionein	bacterial and fungal pathogens like
	apple scab or fireblight
Ribonuclease	bacterial and fungal pathogens like
	apple scab or fireblight
Antifungal polypeptide AlyAFP	bacterial and fungal pathogens like
	apple scab or fireblight
oxalate oxidase	bacterial and fungal pathogens like
	apple scab or fireblight
glucose oxidase	bacterial and fungal pathogens like
	apple scab or fireblight
pyrrolnitrin synthesis genes	bacterial and fungal pathogens like
	apple scab or fireblight
serine/threonine kinases	bacterial and fungal pathogens like
	apple scab or fireblight
Cecropin B	bacterial and fungal pathogens like
	apple scab or fireblight
Phenylalanine ammonia lyase (PAL)	bacterial and fungal pathogens like
	apple scab or fireblight
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial and fungal pathogens like

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	apple scab or fireblight
Osmotin	bacterial and fungal pathogens like
	apple scab or fireblight
Alpha Hordothionin	bacterial and fungal pathogens like
	apple scab or fireblight
Systemin	bacterial and fungal pathogens like
	apple scab or fireblight
Polygalacturonase inhibitors	bacterial and fungal pathogens like
	apple scab or fireblight
Prf regulatory gene	bacterial and fungal pathogens like
	apple scab or fireblight
phytoalexins	bacterial and fungal pathogens like
	apple scab or fireblight
B-1,3-glucanase antisense	bacterial and fungal pathogens like
	apple scab or fireblight
receptor kinase	bacterial and fungal pathogens like
	apple scab or fireblight
Hypersensitive response eliciting	bacterial and fungal pathogens like
polypeptide	apple scab or fireblight
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Lytic protein	bacterial and fungal pathogens like
	apple scab or fireblight
Lysozym	bacterial and fungal pathogens like
	apple scab or fireblight
Chitinases	bacterial and fungal pathogens like
	apple scab or fireblight
Barnase	bacterial and fungal pathogens like
	apple scab or fireblight
Glucanases	bacterial and fungal pathogens like
	apple scab or fireblight
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Effected target or expressed principle(s)	Crop phenotype / Tolerance to
double stranded ribonuclease	viruses
Coat proteins	viruses
17kDa or 60 kDa protein	viruses
Nuclear inclusion proteins eg. a or b or	viruses
Nucleoprotein	
Pseudoubiquitin	viruses
Replicase	viruses
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids, mites
Bacillus cereus toxins, Photorabdus and	
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, aphids, mites
Peroxidase	lepidoptera, aphids, mites
Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids, mites
aminopeptidase inhibitor	
Lectines	lepidoptera, aphids, mites
Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids , mites
CPTI	
ribosome inactivating protein	lepidoptera, aphids, mites
stilbene synthase	lepidoptera, aphids, diseases, mites
HMG-CoA reductase	lepidoptera, aphids, mites
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
CBI	root knot nematodes
Antifeeding principles induced at a	nematodes eg root knot nematodes, root
nematode feeding site	cyst nematodes

Table A13: Crop Melons

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial or fungal pathogens like
oxidase antisense	phytophtora
Metallothionein	bacterial or fungal pathogens like
	phytophtora
Ribonuclease	bacterial or fungal pathogens like
	phytophtora
Antifungal polypeptide AlyAFP	bacterial or fungal pathogens like
	phytophtora

oxalate oxidase glucose oxidase glucose oxidase pyrrolnitrin synthesis genes pyrrolnitrin synthesis genes bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora serine/threonine kinases bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Phenylalanine ammonia lyase (PAL) Phenylalanine ammonia lyase (PAL) Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Dosmotin Dosmotin Alpha Hordothionin bacterial or fungal pathogens like phytophtora	Effected target or expressed principle(s)	Crop phenotype / Tolerance to
glucose oxidase pyrrolnitrin synthesis genes bacterial or fungal pathogens like phytophtora Dosmotin Alpha Hordothionin bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like	oxalate oxidase	bacterial or fungal pathogens like
phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like		phytophtora
pyrrolnitrin synthesis genes bacterial or fungal pathogens like phytophtora Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens like phytophtora Daterial or fungal pathogens like phytophtora Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like	glucose oxidase	bacterial or fungal pathogens like
serine/threonine kinases serine/threonine kinases bacterial or fungal pathogens like phytophtora Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens like phytophtora Osmotin Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora		phytophtora
Serine/threonine kinases bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Phenylalanine ammonia lyase (PAL) Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Osmotin bacterial or fungal pathogens like phytophtora Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora	pyrrolnitrin synthesis genes	bacterial or fungal pathogens like
Descriping a phytophtora Descriping a pathogens like phytophtora Alpha Hordothionin Descriping a pathogens like phytophtora Descriping a pathogens like phyt		phytophtora
Cecropin B bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Cf genes eg. Cf 9 Cf5 Cf4 Cf2 Datterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Dosmotin Alpha Hordothionin Bacterial or fungal pathogens like phytophtora Systemin Polygalacturonase inhibitors Prf regulatory gene Prf regulatory gene B-1,3-glucanase antisense B-1,3-glucanase antisense Hypersensitive response eliciting bacterial or fungal pathogens like phytophtora	serine/threonine kinases	bacterial or fungal pathogens like
Phenylalanine ammonia lyase (PAL) Phenylalanine ammonia lyase (PAL) Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens like phytophtora Dosmotin Alpha Hordothionin bacterial or fungal pathogens like phytophtora Bystemin Polygalacturonase inhibitors Prf regulatory gene Phytophtora bacterial or fungal pathogens like phytophtora		phytophtora
Phenylalanine ammonia lyase (PAL) bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Osmotin bacterial or fungal pathogens like phytophtora Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora Boundary gene Pri regulatory gene bacterial or fungal pathogens like phytophtora	Cecropin B	bacterial or fungal pathogens like
Description of the phytophtora o		phytophtora
Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora	Phenylalanine ammonia lyase (PAL)	bacterial or fungal pathogens like
Osmotin Descriptor Descriptor Descriptor Descriptor Descriptor Alpha Hordothionin Descriptor D		phytophtora
Osmotin bacterial or fungal pathogens like phytophtora Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora	Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial or fungal pathogens like
Alpha Hordothionin Alpha Hordothionin bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora		phytophtora
Alpha Hordothionin bacterial or fungal pathogens like phytophtora Systemin bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora	Osmotin	bacterial or fungal pathogens like
Systemin Description Description Polygalacturonase inhibitors Pri regulatory gene Description Description Phytophtora Description Descripti		phytophtora
Systemin bacterial or fungal pathogens like phytophtora Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like	Alpha Hordothionin	bacterial or fungal pathogens like
Polygalacturonase inhibitors bacterial or fungal pathogens like phytophtora Prf regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora		phytophtora
Polygalacturonase inhibitors Prf regulatory gene bacterial or fungal pathogens like phytophtora phytophtora phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora	Systemin	bacterial or fungal pathogens like
Prif regulatory gene bacterial or fungal pathogens like phytophtora phytoalexins bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like		phytophtora
Prf regulatory gene bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like	Polygalacturonase inhibitors	bacterial or fungal pathogens like
phytophtora phytophtora bacterial or fungal pathogens like phytophtora B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like		phytophtora
phytoalexins B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like	Prf regulatory gene	bacterial or fungal pathogens like
B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora receptor kinase bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like		phytophtora
B-1,3-glucanase antisense bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like	phytoalexins	bacterial or fungal pathogens like
receptor kinase bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like		phytophtora
receptor kinase bacterial or fungal pathogens like phytophtora Hypersensitive response eliciting bacterial or fungal pathogens like	B-1,3-glucanase antisense	bacterial or fungal pathogens like
hypersensitive response eliciting bacterial or fungal pathogens like		phytophtora
Hypersensitive response eliciting bacterial or fungal pathogens like	receptor kinase	bacterial or fungal pathogens like
		phytophtora
polypeptide phytophtora	Hypersensitive response eliciting	bacterial or fungal pathogens like
	polypeptide	phytophtora

Systemic acquires resistance (SAR) genes Lytic protein Lysozym Chitinases Barnase Barnase Glucanases double stranded ribonuclease Coat proteins 17kDa or 60 kDa protein Nuclear inclusion proteins eg. a or b or Nucleoprotein Pseudoubiquitin Pseudoubiquitin Replicase Peroxidase Aminopeptidase inhibitors Lysozym Viral, bacterial, fungal, nematodal pathogens like phytophtora bacterial or fungal pathogens like phytophtora viruses as CMV., PRSV, WMV2, SMV, ZYMV viruses as CMV, PRSV, WMV2, SMV, ZYMV viruses as CMV,, PRSV, WMV2, SMV, ZYMV viruses as CMV,, PRSV, WMV2, SMV, ZYMV viruses as CMV,, PRSV, WMV2, SMV, ZYMV lepidoptera, aphids, mites lepidoptera, aphids, mites, whitefly	Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Lytic protein Lysozym Lysozym Chitinases bacterial or fungal pathogens like phytophtora viruses as CMV., PRSV, WMV2, SMV, ZYMV viruses as CMV., PRSV, WM	Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
phytophtora bacterial or fungal pathogens like phytophtora Chitinases Barnase Barnase Glucanases double stranded ribonuclease Coat proteins 17kDa or 60 kDa protein Pseudoubiquitin Pseudoubiquitin Pseudoubiquitin Replicase Bacillus thuringiensis toxins, VIP 3, Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Chitinase bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora bacterial or fungal pathogens like phytophtora viruses as CMV,, PRSV, WMV2, SMV, ZYMV lepidoptera, aphids, mites, whitefly lepidoptera, aphids, mites, whitefly lepidoptera, aphids, mites, whitefly	genes	pathogens
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Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Aminopeptidase inhibitors eg. Leucine lepidoptera, aphids, mites, whitefly lepidoptera, aphids, mites, whitefly	•	lepidoptera, aprilds, mites
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	ammopephidase inhibitor	

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Lectines	lepidoptera, aphids, mites, whitefly
Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids, mites, whitefly
CPTI, virgiferin	
ribosome inactivating protein	lepidoptera, aphids, mites, whitefly
stilbene synthase	lepidoptera, aphids, mites, whitefly
HMG-CoA reductase	lepidoptera, aphids, mites, whitefly
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
CBI	root knot nematodes
Antifeeding principles induced at a	nematodes eg root knot nematodes, root
nematode feeding site	cyst nematodes

Table A14: Crop Banana

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such

Effected target or expressed principle(s) Crop phenotype / Tolerance to as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate Synthase (EPSPS) Glyphosate or suifosate Glyphosate oxidoreductase Protoporphyrinogen oxidase (PROTOX) Diphenylethers, cyclic imides, phenylpyrazoles, pyridin derivatives. phenopylate, oxadiazoles etc. Xenobiotics and herbicides such as Cytochrome P450 eg. P450 SU1 or selection Sulfonylureas Polyphenol oxidase or Polyphenol bacterial or fungal pathogens oxidase antisense Metallothionein bacterial or fungal pathogens Ribonuclease bacterial or fungal pathogens Antifungal polypeptide AlyAFP bacterial or fungal pathogens oxalate oxidase bacterial or fungal pathogens glucose oxidase bacterial or fungal pathogens pyrrolnitrin synthesis genes bacterial or fungal pathogens serine/threonine kinases bacterial or fungal pathogens Cecropin B bacterial or fungal pathogens Phenylalanine ammonia lyase (PAL) bacterial or fungal pathogens Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens Osmotin bacterial or fungal pathogens Alpha Hordothionin bacterial or fungal pathogens Systemin bacterial or fungal pathogens Polygalacturonase inhibitors bacterial or fungal pathogens Prf regulatory gene bacterial or fungal pathogens phytoalexins bacterial or fungal pathogens B-1,3-glucanase antisense bacterial or fungal pathogens receptor kinase bacterial or fungal pathogens Hypersensitive response eliciting bacterial or fungal pathogens polypeptide Systemic acquires resistance (SAR) viral, bacterial, fungal, nematodal

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
genes	pathogens
Lytic protein	bacterial or fungal pathogens
Lysozym	bacterial or fungal pathogens
Chitinases	bacterial or fungal pathogens
Barnase	bacterial or fungal pathogens
Glucanases	bacterial or fungal pathogens
double stranded ribonuclease	viruses as Banana bunchy top virus
	(BBTV)
Coat proteins	viruses as Banana bunchy top virus
	(BBTV)
17kDa or 60 kDa protein	viruses as Banana bunchy top virus
	(BBTV)
Nuclear inclusion proteins eg. a or b or	viruses as Banana bunchy top virus
Nucleoprotein	(BBTV)
Pseudoubiquitin	viruses as Banana bunchy top virus
	(BBTV)
Replicase	viruses as Banana bunchy top virus
	(BBTV)
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids, mites, nematodes
Bacillus cereus toxins, Photorabdus and	
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, aphids, mites, nematodes
Peroxidase	lepidoptera, aphids, mites, nematodes
Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids, mites, nematodes
aminopeptidase inhibitor	
Lectines	lepidoptera, aphids, mites, nematodes
Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids, mites, nematodes
CPTI, virgiferin	
ribosome inactivating protein	lepidoptera, aphids, mites, nematodes
stilbene synthase	lepidoptera, aphids, mites, nematodes
HMG-CoA reductase	lepidoptera, aphids, mites, nematodes
Cyst nematode hatching stimulus	cyst nematodes

Effected target or expressed principle(s)	Crop phenotype / Tolerance to		
Barnase	nematodes eg root knot nematodes and		
	cyst nematodes		
CBI	root knot nematodes		
Antifeeding principles induced at a	nematodes eg root knot nematodes, root		
nematode feeding site	cyst nematodes		

Table A 15: Crop Cotton

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,
	Triazolopyrimidines,
	Pyrimidyloxybenzoates, Phtalides
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
	ı

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial or fungal pathogens
oxidase antisense	
Metallothionein	bacterial or fungal pathogens
Ribonuclease	bacterial or fungal pathogens
Antifungal polypeptide AlyAFP	bacterial or fungal pathogens
oxalate oxidase	bacterial or fungal pathogens
glucose oxidase	bacterial or fungal pathogens
pyrrolnitrin synthesis genes	bacterial or fungal pathogens
serine/threonine kinases	bacterial or fungal pathogens
Cecropin B	bacterial or fungal pathogens
Phenylalanine ammonia lyase (PAL)	bacterial or fungal pathogens
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial or fungal pathogens
Osmotin	bacterial or fungal pathogens
Alpha Hordothionin	bacterial or fungal pathogens
Systemin	bacterial or fungal pathogens
Polygalacturonase inhibitors	bacterial or fungal pathogens
Prf regulatory gene	bacterial or fungal pathogens
phytoalexins	bacterial or fungal pathogens
B-1,3-glucanase antisense	bacterial or fungal pathogens
receptor kinase	bacterial or fungal pathogens
Hypersensitive response eliciting	bacterial or fungal pathogens
polypeptide	
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Lytic protein	bacterial or fungal pathogens
Lysozym	bacterial or fungal pathogens
Chitinases	bacterial or fungal pathogens
Barnase	bacterial or fungal pathogens
Glucanases	bacterial or fungal pathogens
double stranded ribonuclease	viruses as wound tumor virus (WTV)

Coat proteins 17kDa or 60 kDa protein Nuclear inclusion proteins eg. a or b or Nucleoprotein Pseudoubiquitin Replicase Bacillus thuringiensis toxins, VIP 3, Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTi, virgiferin ribosome inactivating protein Protease Inhibitors eg cystatin, patatin, CPTi, virgiferin ribosome inactivating stimulus Barnase CBI Antifeeding principles induced at a nematode feeding site viruses as wound tumor virus (WTV) viruses as vound tumor virus (WTV) viruses as wound tumor virus (WTV) viru	Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Nuclear inclusion proteins eg. a or b or Nucleoprotein Pseudoubiquitin Replicase Bacillus thuringiensis toxins, VIP 3, Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein HMG-CoA reductase HMG-CoA reductase Antifeeding principles induced at a viruses as wound tumor virus (WTV) lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, white	Coat proteins	viruses as wound tumor virus (WTV)
Nucleoprotein Pseudoubiquitin Replicase Bacillus thuringiensis toxins, VIP 3, Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein HMG-CoA reductase Whitefly HMG-CoA reductase CBI Antifeeding principles induced at a viruses as wound tumor virus (WTV) lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, m	17kDa or 60 kDa protein	viruses as wound tumor virus (WTV)
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Replicase Bacillus thuringiensis toxins, VIP 3, Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stillbene synthase HMG-CoA reductase CBI Antifeeding principles induced at a viruses as wound tumor virus (WTV) lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes root knot nematodes and cyst nematodes nematodes eg root knot nematodes, root	Nucleoprotein	
Bacillus thuringiensis toxins, VIP 3, Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase Peroxidase Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stillbene synthase HMG-CoA reductase HMG-CoA reductase CBI Antifeeding principles induced at a lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes root knot nematodes and cyst nematodes nematodes eg root knot nematodes, root	Pseudoubiquitin	viruses as wound tumor virus (WTV)
Bacillus cereus toxins, Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase lepidoptera, aphids, mites, nematodes, whitefly Peroxidase lepidoptera, aphids, mites, nematodes, whitefly Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor lectines lepidoptera, aphids, mites, nematodes, whitefly Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein lepidoptera, aphids, mites, nematodes, whitefly stilbene synthase lepidoptera, aphids, mites, nematodes, whitefly HMG-CoA reductase lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes eg root knot nematodes and cyst nematodes CBI nematodes eg root knot nematodes, root	Replicase	viruses as wound tumor virus (WTV)
Xenorhabdus toxins 3- Hydroxysteroid oxidase Bepidoptera, aphids, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, whitefly Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein Iepidoptera, aphids, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nematodes, mites, nematodes, mites, nematodes, whitefly Iepidoptera, aphids, mites, nematodes, mites, nema	Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids, mites, nematodes,
lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, white	Bacillus cereus toxins, Photorabdus and	whitefly
whitefly lepidoptera, aphids, mites, nematodes, whitefly Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stillbene synthase HMG-CoA reductase HMG-CoA reductase CPII cyst nematode hatching stimulus Barnase CBI Antifeeding principles induced at a whitefly lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes nematodes eg root knot nematodes and cyst nematodes root knot nematodes, root	Xenorhabdus toxins	
Peroxidase lepidoptera, aphids, mites, nematodes, whitefly ribosome inactivating protein lepidoptera, aphids, mites, nematodes, whitefly cyst nematode hatching stimulus lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes eg root knot nematodes and cyst nematodes er root knot nematodes and cyst nematodes er root knot nematodes, root nematodes, root nematodes er root knot nematodes, root	3- Hydroxysteroid oxidase	lepidoptera, aphids, mites, nematodes,
Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stilbene synthase HMG-CoA reductase Cyst nematode hatching stimulus Barnase CBI Antifeeding principles induced at a whitefly lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes nematodes root knot nematodes, root		whitefly
Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor Lectines Lectines Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stilbene synthase HMG-CoA reductase HMG-CoA reductase Barnase CBI Antifeeding principles induced at a Lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes root knot nematodes and cyst nematodes root knot nematodes, root	Peroxidase	lepidoptera, aphids, mites, nematodes,
aminopeptidase inhibitor Lectines lepidoptera, aphids, mites, nematodes, whitefly Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein lepidoptera, aphids, mites, nematodes, whitefly stilbene synthase lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase nematodes eg root knot nematodes and cyst nematodes CBI Antifeeding principles induced at a nematodes eg root knot nematodes, root		whitefly
Lectines lepidoptera, aphids, mites, nematodes, whitefly Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stilbene synthase lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase cyst nematodes nematodes eg root knot nematodes and cyst nematodes CBI Antifeeding principles induced at a nematodes eg root knot nematodes, root	Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids, mites, nematodes,
whitefly lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly stilbene synthase lepidoptera, aphids, mites, nematodes, whitefly cyst nematode hatching stimulus Barnase nematodes eg root knot nematodes and cyst nematodes CBI Antifeeding principles induced at a nematodes eg root knot nematodes, root	aminopeptidase inhibitor	whitefly
Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein stilbene synthase HMG-CoA reductase Cyst nematode hatching stimulus Barnase CBI Antifeeding principles induced at a lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes nematodes root knot nematodes nematodes eg root knot nematodes, root	Lectines	lepidoptera, aphids, mites, nematodes,
CPTI, virgiferin ribosome inactivating protein stilbene synthase lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase cyst nematodes nematodes eg root knot nematodes and cyst nematodes CBI Antifeeding principles induced at a root knot nematodes, root		whitefly
ribosome inactivating protein lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly HMG-CoA reductase lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly cyst nematode hatching stimulus Barnase nematodes eg root knot nematodes and cyst nematodes CBI Antifeeding principles induced at a nematodes eg root knot nematodes, root	Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids, mites, nematodes,
whitefly lepidoptera, aphids, mites, nematodes, whitefly HMG-CoA reductase lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase cyst nematodes nematodes eg root knot nematodes and cyst nematodes CBI root knot nematodes Antifeeding principles induced at a nematodes eg root knot nematodes, root	CPTI, virgiferin	whitefly
stilbene synthase lepidoptera, aphids, mites, nematodes, whitefly lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase cyst nematodes eg root knot nematodes and cyst nematodes CBI Antifeeding principles induced at a lepidoptera, aphids, mites, nematodes, whitefly cyst nematodes root knot nematodes and cyst nematodes root knot nematodes, root	ribosome inactivating protein	lepidoptera, aphids, mites, nematodes,
Whitefly Iepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase CBI Antifeeding principles induced at a whitefly cyst nematodes nematodes root knot nematodes nematodes eg root knot nematodes, root		whitefly
HMG-CoA reductase lepidoptera, aphids, mites, nematodes, whitefly Cyst nematode hatching stimulus Barnase nematodes eg root knot nematodes and cyst nematodes CBI root knot nematodes Antifeeding principles induced at a nematodes eg root knot nematodes, root	stilbene synthase	lepidoptera, aphids, mites, nematodes,
Cyst nematode hatching stimulus Barnase CBI Antifeeding principles induced at a whitefly cyst nematodes nematodes eg root knot nematodes and cyst nematodes root knot nematodes nematodes eg root knot nematodes, root		whitefly
Cyst nematode hatching stimulus Barnase cyst nematodes nematodes eg root knot nematodes and cyst nematodes CBI root knot nematodes Antifeeding principles induced at a nematodes eg root knot nematodes, root	HMG-CoA reductase	lepidoptera, aphids, mites, nematodes,
Barnase nematodes eg root knot nematodes and cyst nematodes CBI root knot nematodes Antifeeding principles induced at a nematodes eg root knot nematodes, root		whitefly
cyst nematodes CBI root knot nematodes Antifeeding principles induced at a nematodes eg root knot nematodes, root	Cyst nematode hatching stimulus	cyst nematodes
CBI root knot nematodes Antifeeding principles induced at a nematodes eg root knot nematodes, root	Barnase	nematodes eg root knot nematodes and
Antifeeding principles induced at a nematodes eg root knot nematodes, root		cyst nematodes
	CBI	root knot nematodes
nematode feeding site cyst nematodes	Antifeeding principles induced at a	nematodes eg root knot nematodes, root
	nematode feeding site	cyst nematodes

Table A 16: Crop Sugarcane

Effected target or expressed principle(s) Crop phenotype / Tolerance to Sulfonylureas, Imidazolinones, Acetolactate synthase (ALS) Triazolopyrimidines, Pyrimidyloxybenzoates, Phtalides Aryloxyphenoxyalkanecarboxylic acids, AcetylCcA Carboxylase (ACCase) cyclohexanediones Hydroxyphenylpyruvate dioxygenase isoxazoles such as isoxaflutol or Isoxachlortol, Triones such as (HPPD) mesotrione or sulcotrione Phosphinothricin acetyl transferase Phosphinothricin O-Methyl transferase altered lignin levels Glutamine synthetase Glufosinate, Bialaphos Adenylosuccinate Lyase (ADSL) Inhibitors of IMP and AMP synthesis Adenylosuccinate Synthase Inhibitors of adenylosuccinate synthesis Anthranilate Synthase Inhibitors of tryptophan synthesis and catabolism Nitrilase 3,5-dihalo-4-hydroxy-benzonitriles such as Bromoxynil and loxinyl 5-Enolpyruvyl-3phosphoshikimate Glyphosate or sulfosate Synthase (EPSPS) Glyphosate oxidoreductase Glyphosate or sulfosate Protoporphyrinogen oxidase (PROTOX) Diphenylethers, cyclic imides,

Cytochrome P450 eg. P450 SU1 or selection
Polyphenol oxidase or Polyphenol oxidase antisense
Metallothionein
Ribonuclease
Antifungal polypeptide AlyAFP

bacterial or fungal pathogens bacterial or fungal pathogens bacterial or fungal pathogens

bacterial or fungal pathogens

phenylpyrazoles, pyridin derivatives,

Xenobiotics and herbicides such as

phenopylate, oxadiazoles etc.

Sulfonylureas

Effected target or expressed principle(s) oxalate oxidase glucose oxidase pyrrolnitrin synthesis genes serine/threonine kinases Cecropin B Phenylalanine ammonia lyase (PAL) Cf genes eg. Cf 9 Cf5 Cf4 Cf2 Osmotin Alpha Hordothionin Systemin Polygalacturonase inhibitors Prf regulatory gene phytoalexins B-1,3-glucanase antisense receptor kinase Hypersensitive response eliciting polypeptide

Systemic acquires resistance (SAR)

genes

Lytic protein

Lysozym

Crop phenotype / Tolerance to bacterial or fungal pathogens bacterial or fungal pathogens

Chitinases
Barnase
Glucanases
double stranded ribonuclease
Coat proteins
17kDa or 60 kDa protein
Nuclear inclusion proteins eg. a or b or
Nucleoprotein
Pseudoubiquitin
Replicase

viral, bacterial, fungal, nematodal pathogens
bacterial or fungal pathogens eg clavibacter
bacterial or fungal pathogens bacterial or fungal pathogens bacterial or fungal pathogens bacterial or fungal pathogens viruses as SCMV, SrMV viruses as SCMV, SrMV viruses as SCMV, SrMV viruses as SCMV, SrMV viruses as SCMV, SrMV

viruses as SCMV, SrMV

viruses as SCMV, SrMV

Effected target or expressed principle(s) Bacillus thuringiensis toxins, VIP 3. Bacillus cereus toxins. Photorabdus and Xenorhabdus toxins 3- Hydroxysteroid oxidase

Peroxidase

Aminopeptidase inhibitors eg. Leucine aminopeptidase inhibitor Lectines

Protease Inhibitors eg cystatin, patatin, CPTI, virgiferin ribosome inactivating protein

stilbene synthase

HMG-CoA reductase

Cyst nematode hatching stimulus Barnase

CBI

Antifeeding principles induced at a nematode feeding site

Table A 17: Crop Sunflower

Crop phenotype / Tolerance to lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer

lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer

lepidoptera, aphids, mites, nematodes. whitefly, beetles eg mexican rice borer lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer lepidoptera, aphids, mites, nematodes, whitefly, beetles eg mexican rice borer cyst nematodes nematodes eg root knot nematodes and cyst nematodes root knot nematodes

nematodes eg root knot nematodes, root

Effected target or expressed principle(s)

Crop phenotype / Tolerance to

cyst nematodes

Acetolactate synthase (ALS)

Sulfonylureas, Imidazolinones,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to			
	Triazolopyrimidines,			
	Pyrimidyloxybenzoates, Phtalides			
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,			
	cyclohexanediones			
Hydroxyphenylpyruvate dioxygenase	Isoxazoles such as Isoxaflutol or			
(HPPD)	isoxachlortol, Triones such as			
	mesotrione or sulcotrione			
Phosphinothricin acetyl transferase	Phosphinothricin			
O-Methyl transferase	altered lignin levels			
Glutamine synthetase	Glufosinate, Bialaphos			
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis			
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis			
Anthranilate Synthase	Inhibitors of tryptophan synthesis and			
	catabolism			
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such			
	as Bromoxynil and loxinyl			
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate			
Synthase (EPSPS)				
Glyphosate oxidoreductase	Glyphosate or sulfosate			
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,			
	phenylpyrazoles, pyridin derivatives,			
	phenopylate, oxadiazoles etc.			
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as			
selection	Sulfonylureas			
Polyphenol oxidase or Polyphenol	bacterial or fungal pathogens			
oxidase antisense				
Metallothionein	bacterial or fungal pathogens			
Ribonuclease	bacterial or fungal pathogens			
Antifungal polypeptide AlyAFP	bacterial or fungal pathogens			
oxalate oxidase	bacterial or fungal pathogens eg			
	sclerotinia			
glucose oxidase	bacterial or fungal pathogens			

Xenorhabdus toxins

Effected target or expressed principle(s) Crop phenotype / Tolerance to pyrrolnitrin synthesis genes bacterial or fungal pathogens serine/threonine kinases bacterial or fungal pathogens Cecropin B bacterial or fungal pathogens Phenylalanine ammonia lyase (PAL) bacterial or fungal pathogens Cf genes eg. Cf 9 Cf5 Cf4 Cf2 bacterial or fungal pathogens Osmotin bacterial or fungal pathogens Alpha Hordothionin bacterial or fungal pathogens Systemin bacterial or fungal pathogens Polygalacturonase inhibitors bacterial or fungal pathogens Prf regulatory gene bacterial or fungal pathogens phytoalexins bacterial or fungal pathogens B-1,3-glucanase antisense bacterial or fungal pathogens receptor kinase bacterial or fungal pathogens Hypersensitive response eliciting bacterial or fungal pathogens polypeptide Systemic acquires resistance (SAR) viral, bacterial, fungal, nematodal genes pathogens Lytic protein bacterial or fungal pathogens Lysozym bacterial or fungal pathogens Chitinases bacterial or fungal pathogens Barnase bacterial or fungal pathogens Glucanases bacterial or fungal pathogens double stranded ribonuclease viruses as CMV, TMV Coat proteins viruses as CMV, TMV 17kDa or 60 kDa protein viruses as CMV, TMV Nuclear inclusion proteins eg. a or b or viruses as CMV. TMV Nucleoprotein Pseudoubiquitin viruses as CMV, TMV Replicase viruses as CMV, TMV Bacillus thuringiensis toxins, VIP 3, lepidoptera, aphids, mites, nematodes, Bacillus cereus toxins, Photorabdus and whitefly, beetles

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
3- Hydroxysteroid oxidase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles
Peroxidase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles
Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids, mites, nematodes,
aminopeptidase inhibitor	whitefly, beetles
Lectines	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles
Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids, mites, nematodes,
CPTI, virgiferin	whitefly, beetles
ribosome inactivating protein	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles
stilbene synthase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles
HMG-CoA reductase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
	cyst nematodes
CBI	root knot nematodes
Antifeeding principles induced at a	nematodes eg root knot nematodes, root
nematode feeding site	cyst nematodes
	ı

Table A 18: Crop Sugarbeet, Beet root

Effected target or expressed principle(s)	Crop phenotype / Tolerance to				
Acetolactate synthase (ALS)	Sulfonylureas, Imidazolinones,				
	Triazolopyrimidines,				
	Pyrimidyloxybenzoates, Phtalides				
AcetylCoA Carboxylase (ACCase)	Aryloxyphenoxyalkanecarboxylic acids,				

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	cyclohexanediones
Hydroxyphenylpyruvate dioxygenase	isoxazoles such as isoxaflutol or
(HPPD)	Isoxachlortol, Triones such as
	mesotrione or sulcotrione
Phosphinothricin acetyl transferase	Phosphinothricin
O-Methyl transferase	altered lignin levels
Glutamine synthetase	Glufosinate, Bialaphos
Adenylosuccinate Lyase (ADSL)	Inhibitors of IMP and AMP synthesis
Adenylosuccinate Synthase	Inhibitors of adenylosuccinate synthesis
Anthranilate Synthase	Inhibitors of tryptophan synthesis and
	catabolism
Nitrilase	3,5-dihalo-4-hydroxy-benzonitriles such
	as Bromoxynil and loxinyl
5-Enolpyruvyl-3phosphoshikimate	Glyphosate or sulfosate
Synthase (EPSPS)	
Glyphosate oxidoreductase	Glyphosate or sulfosate
Protoporphyrinogen oxidase (PROTOX)	Diphenylethers, cyclic imides,
	phenylpyrazoles, pyridin derivatives,
	phenopylate, oxadiazoles etc.
Cytochrome P450 eg. P450 SU1 or	Xenobiotics and herbicides such as
selection	Sulfonylureas
Polyphenol oxidase or Polyphenol	bacterial or fungal pathogens
oxidase antisense	
Metallothionein	bacterial or fungal pathogens
Ribonuclease	bacterial or fungal pathogens
Antifungal polypeptide AlyAFP	bacterial or fungal pathogens
oxalate oxidase	bacterial or fungal pathogens eg
	sclerotinia
glucose oxidase	bacterial or fungal pathogens
pyrrolnitrin synthesis genes	bacterial or fungal pathogens
serine/threonine kinases	bacterial or fungal pathogens
Cecropin B	bacterial or fungal pathogens

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
Phenylalanine ammonia lyase (PAL)	bacterial or fungal pathogens
Cf genes eg. Cf 9 Cf5 Cf4 Cf2	bacterial or fungal pathogens
Osmotin	bacterial or fungal pathogens
Alpha Hordothionin	bacterial or fungal pathogens
Systemin	bacterial or fungal pathogens
Polygalacturonase inhibitors	bacterial or fungal pathogens
Prf regulatory gene	bacterial or fungal pathogens
phytoalexins	bacterial or fungal pathogens
B-1,3-glucanase antisense	bacterial or fungal pathogens
AX + WIN proteins	bacterial or fungal pathogens like
•	Cercospora beticola
receptor kinase	bacterial or fungal pathogens
Hypersensitive response eliciting	bacterial or fungal pathogens
polypeptide	
Systemic acquires resistance (SAR)	viral, bacterial, fungal, nematodal
genes	pathogens
Lytic protein	bacterial or fungal pathogens
Lysozym	bacterial or fungal pathogens
Chitinases	bacterial or fungal pathogens
Barnase	bacterial or fungal pathogens
Glucanases	bacterial or fungal pathogens
double stranded ribonuclease	viruses as BNYVV
Coat proteins	viruses as BNYVV
17kDa or 60 kDa protein	viruses as BNYVV
Nuclear inclusion proteins eg. a or b or	viruses as BNYVV
Nucleoprotein	
Pseudoubiquitin	viruses as BNYVV
Replicase	viruses as BNYVV
Bacillus thuringiensis toxins, VIP 3,	lepidoptera, aphids, mites, nematodes,
Bacillus cereus toxins, Photorabdus and	whitefly, beetles, rootflies
Xenorhabdus toxins	
3- Hydroxysteroid oxidase	lepidoptera, aphids, mites, nematodes,

Effected target or expressed principle(s)	Crop phenotype / Tolerance to
	whitefly, beetles, rootflies
Peroxidase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles, rootflies
Aminopeptidase inhibitors eg. Leucine	lepidoptera, aphids, mites, nematodes,
aminopeptidase inhibitor	whitefly, beetles, rootflies
Lectines	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles, rootflies
Protease Inhibitors eg cystatin, patatin,	lepidoptera, aphids, mites, nematodes,
CPTI, virgiferin	whitefly, beetles, rootflies
ribosome inactivating protein	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles, rootflies
stilbene synthase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles, rootflies
HMG-CoA reductase	lepidoptera, aphids, mites, nematodes,
	whitefly, beetles, rootflies
Cyst nematode hatching stimulus	cyst nematodes
Barnase	nematodes eg root knot nematodes and
·	cyst nematodes
Beet cyst nematode resistance locus	cyst nematodes
CBI	root knot nematodes
Antifeeding principles induced at a	nematodes eg root knot nematodes, root
nematode feeding site	cyst nematodes

The abovementioned animal pests which can be controlled by the method according to the invention include; for example, insects, representatives of the order acarina and representatives of the class nematoda; especially

from the order Lepidoptera Acleris spp., Adoxophyes spp., especially Adoxophyes reticulana; Aegeria spp., Agrotis spp., especially Agrotis spinifera; Alabama argillaceae, Amylois spp., Anticarsia gemmatalis, Archips spp., Argyrotaenia spp., Autographa spp., Busseola fusca, Cadra cautella, Carposina nipponensis, Chilo spp., Choristoneura spp., Clysia ambiguella, Cnaphalocrocis spp., Cnephasia spp., Cochylis spp., Coleophora spp., Crocidolomia binotalis, Cryptophlebia leucotreta, Cydia spp., especially Cydia pomonella;

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Diatraea spp., Diparopsis castanea, Earias spp., Ephestia spp., especially E. Khüniella; Eucosma spp., Eupoecilia ambiguella, Euproctis spp., Euxoa spp., Grapholita spp., Hedya nubiferana, Heliothis spp., especially H. Virescens und H. zea; Hellula undalis, Hyphantria cunea, Keiferia lycopersicella, Leucoptera scitella, Lithocollethis spp., Lobesiaspp., Lymantria spp., Lyonetia spp., Malacosoma spp., Mamestra brassicae, Manduca sexta, Operophtera spp., Ostrinia nubilalis, Pammene spp., Pandemis spp., Panolis flammea. Pectinophora spp.. Phthorimaea operculella, Pieris rapae, Pieris spp., Plutella xylostella. Prays spp., Scirpophaga spp., Sesamia spp., Sparganothis spp., Spodopteralittoralis. Synanthedon spp., Thaumetopoea spp., Tortrix spp., Trichoplusia ni and Yponomeuta spp.; from the order Coleoptera, for example Agriotes spp., Anthonomus spp., Atomaria linearis. Chaetocnema tibialis, Cosmopolites spp., Curculio spp., Dermestes spp., Diabrotica spp.,

Epilachna spp., Eremnus spp., Leptinotarsa decemlineata, Lissorhoptrus spp., Melolontha spp., Oryzaephilus spp., Otiorhynchus spp., Phlyctinus spp., Popillia spp., Psylliodes spp., Rhizopertha spp., Scarabeidae, Sitophilus spp., Sitotroga spp., Tenebrio spp., Tribolium spp. and Trogoderma spp.;

from the order Orthoptera, for example Blatta spp., Blattella spp., Gryllotaipa spp., Leucophaea maderae, Locusta spp., Periplaneta spp. and Schistocerca spp.;

from the order Isoptera, for example Reticulitermes spp.;

from the order Psocoptera, for example Liposcelis spp.;

from the order Anoplura, for example Haematopinus spp., Linognathus spp., Pediculus spp., Pemphigus spp. and Phylloxera spp.;

from the order Mallophaga, for example Damalinea spp. and Trichodectes spp.;

from the order Thysanoptera, for example Frankliniella spp., Hercinothrips spp., Taeniothrips spp., Thrips palmi, Thrips tabaci and Scirtothrips aurantii;

from the order Heteroptera, for example Cimex spp., Distantiella theobroma, Dysdercus spp., Euchistus spp. Eurygaster spp. Leptocorisa spp., Nezara spp., Piesma spp., Rhodnius spp., Sahlbergella singularis, Scotinophara spp. and Triatoma spp.;

from the order Homoptera, for example Aleurothrixus floccosus, Aleyrodes brassicae. Aonidiella aurantii, Aphididae, Aphis craccivora, A. fabae, A. gosypii; Aspidiotus spp., Bemisia tabaci, Ceroplaster spp., Chrysomphalus aonidium, Chrysomphalus dictyospermi, Coccus hesperidum, Empoasca spp., Eriosoma lanigerum, Erythroneura spp., Gascardia

spp., Laodelphax spp., Lecanium corni, Lepidosaphes spp., Macrosiphus spp., Myzus spp., especially M.persicae; Nephotettix spp., especially N. cincticeps; Nilaparvata spp., especially N. lugens; Paratoria spp., Pemphigus spp., Planococcus spp., Pseudaulacaspis spp., Pseudococcus spp., especially P. Fragilis, P. citriculus and P. comstocki; Psylla spp., especially P. pyri; Pulvinaria aethiopica, Quadraspidiotus spp., Rhopalosiphum spp., Saissetia spp., Scaphoideus spp., Schizaphis spp., Sitobion spp., Trialeurodes vaporariorum, Trioza erytreae and Unaspis citri;

from the order Hymenoptera, for example Acromyrmex, Atta spp., Cephus spp., Diprion spp., Diprionidae, Gilpinia polytoma, Hoplocampa spp., Lasius spp., Monomorium pharaonis, Neodiprion spp., Solenopsis spp. and Vespa spp.;

from the order Diptera, for example Aedes spp., Antherigona soccata, Bibio hortulanus, Calliphora erythrocephala, Ceratitis spp., Chrysomyia spp., Culex spp., Cuterebra spp., Dacus spp., Drosophila melanogaster, Fannia spp., Gastrophilus spp., Glossina spp., Hypoderma spp., Hyppobosca spp., Liriomyza spp., Lucilia spp., Melanagromyza spp., Musca spp., Oestrus spp., Orseolia spp., Oscinella frit, Pegomyia hyoscyami, Phorbia spp., Rhagoletis pomonella, Sciara spp., Stomoxys spp., Tabanus spp., Tannia spp. and Tipula spp.;

from the order Siphonaptera, for example Ceratophyllus spp. and Xenopsylla cheopis; from the order Thysanura, for example Lepisma saccharina and

from the order Acarina, for example Acarus siro, Aceria sheldoni; Aculus spp., especially A. schlechtendali; Amblyomma spp., Argas spp., Boophilus spp., Brevipalpus spp., especially B. californicus and B. phoenicis; Bryobia praetiosa, Calipitrimerus spp., Chorioptes spp., Dermanyssus gallinae, Eotetranychus spp., especially E.carpini and E. orientalis; Eriophyes spp., especially E. vitis; Hyalomma spp., Ixodes spp., Olygonychus pratensis, Ornithodoros spp., Panonychus spp., especially P. ulmi and P. citri; Phyllocoptruta spp., especially P. oleivora; Polyphagotarsonemus spp., especially P. latus; Psoroptes spp., Rhipicephalus spp., Rhizoglyphus spp., Sarcoptes spp., Tarsonemus spp. and Tetranychus spp., in particular T. urticae, T. cinnabarinus and T. Kanzawai;

representatives of the class Nematoda;

(1) nematodes selected from the group consisting of root knot nematodes, cyst-forming nematodes, stem eelworms and foliar nematodes;

- (2) nematodes selected from the group consisting of Anguina spp.; Aphelenchoides spp.; Ditylenchus spp.; Globodera spp., for example Globodera rostochiensis; Heterodera spp., for example Heterodera avenae, Heterodera glycines, Heterodera schachtii or Heterodera trifolii; Longidorus spp.; Meloidogyne spp., for example Meloidogyne incognita or Meloidogyne javanica; Pratylenchus, for example Pratylenchus neglectans or Pratylenchus penetrans; Radopholus spp., for example Radopholus similis; Trichodorus spp.; Tylenchulus, for example Tylenchulus semipenetrans; and Xiphinema spp.; or
- (3) nematodes selected from the group consisting of Heterodera spp., for example Heterodera glycines; and Meloidogyne spp., for example Meloidogyne incognita.

The method according to the invention allows pests of the abovementioned type to be controlled, i.e. contained or destroyed, which occur, in particular, on transgenic plants, mainly useful plants and ornamentals in agriculture, in horticulture and in forests, or on parts, such as fruits, flowers, foliage, stalks, tubers or roots, of such plants, the protection against these pests in some cases even extending to plant parts which form at a later point in time.

The method according to the invention can be employed advantageously for controlling pests in rice, cereals such as maize or sorghum; in fruit, for example stone fruit, pome fruit and soft fruit such as apples, pears, plums, peaches, almonds, cherries or berries, for example strawberries, raspberries and blackberries; in legumes such as beans, lentils, peas or soya beans; in oil crops such as oilseed rape, mustard, poppies, olives, sunflowers, coconuts, castor-oil plants, cacao or peanuts; in the marrow family such as pumpkins, cucumbers or melons; in fibre plants such as cotton, flax, hemp or jute; in citrus fruit such as oranges, lemons, grapefruit or tangerines; in vegetables such as spinach, lettuce, asparagus, cabbage species, carrots, onions, tomatoes, potatoes, beet or capsicum; in the laurel family such as avocado, Cinnamonium or camphor; or in tobacco, nuts, coffee, egg plants, sugar cane, tea, pepper, grapevines, hops, the banana family, latex plants or ornamentals, mainly in maize, rice, cereals, soya beans, tomatoes, cotton, potatoes, sugar beet, rice and mustard; in particular in cotton, rice, soya beans, potatoes and maize.

It has emerged that the method according to the invention is valuable preventatively and/or curatively in the field of pest control even at low use concentrations of the pesticidal composition and that a very favourable biocidal spectrum is achieved thereby. Combined with a favourable compatibility of the composition employed with warm-blooded species,

fish and plants, the method according to the invention can be employed against all or individual developmental stages of normally-sensitive, but also of normally-resistant, animal pests such as insects and representatives of the order Acarina, depending on the species of the transgenic crop plant to be protected from attack by pests. The insecticidal and/or acaricidal effect of the method according to the invention may become apparent directly, i.e. in a destruction of the pests which occurs immediately or only after some time has elapsed, for example, during ecdysis, or indirectly, for example as a reduced oviposition and/or hatching rate, the good action corresponding to a destruction rate (mortality) of at least 40 to 50%.

Depending on the intended aims and the prevailing circumstances, the pesticides within the scope of invention, which are known per se, are emulsifiable concentrates, suspension concentrates, directly sprayable or dilutable solutions, spreadable pastes, dilute emulsions, wettable powders, soluble powders, dispersible powders, wettable powders, dusts, granules or encapsulations in polymeric substances which comprise a nitroimino- or nitroguanidino-compound.

The active ingredients are employed in these compositions together with at least one of the auxiliaries conventionally used in art of formulation, such as extenders, for example solvents or solid carriers, or such as surface-active compounds (surfactants).

Formulation auxiliaries which are used are, for example, solid carriers, solvents, stabilizers, "slow release" auxiliaries, colourants and, if appropriate, surface-active substances (surfactants). Suitable carriers and auxiliaries are all those substances which are conventionally used for crop protection products. Suitable auxiliaries such as solvents, solid carriers, surface-active compounds, non-ionic surfactants, cationic surfactants, anionic surfactants and other auxiliaries in the compositions employed according to the invention are, for example, those which have been described in EP-A-736 252.

These compositions for controlling pests can be formulated, for example, as wettable powders, dusts, granules, solutions, emulsifiable concentrates, emulsions, suspension concentrates or aerosols. For example, the compositions are of the type described in EP-A-736 252.

The action of the compositions within the scope of invention which comprise a nitroimino- or nitroguanidino-compound can be extended substantially and adapted to prevailing circumstances by adding other insecticidally, acaricidally and/or fungicidally active

ingredients. Suitable examples of added active ingredients are representatives of the following classes of active ingredients: organophosphorous compounds, nitrophenols and derivatives, formamidines, ureas, carbamates, pyrethroids, chlorinated hydrocarbons; especially preferred components in mixtures are, for example, abamectin, emamectin, spinosad, pymetrozine, fenoxycarb, Ti-435, fipronil, pyriproxyfen, diazinon or diafenthiuron.

As a rule, the compositions within the scope of invention comprise 0.1 to 99%, in particular 0.1 to 95%, of a nitroimino- or nitroguanidino-compound and 1 to 99.9%, in particular 5 to 99.9%, of - at least - one solid or liquid auxiliary, it being possible, as a rule, for 0 to 25%, in particular 0.1 to 20%, of the compositions to be surfactants (% in each case meaning per cent by weight). While concentrated compositions are more preferred as commercial products, the end user will, as a rule, use dilute compositions which have considerably lower concentrations of active ingredient.

The compositions according to the invention may also comprise other solid or liquid auxiliaries, such as stabilisers, for example epoxidized or unepoxidized vegetable oils (for example epoxidized coconut oil, rapeseed oil or soya bean oil), antifoams, for example silicone oil, preservatives, viscosity regulators, binders and/or tackifiers, and also fertilizers or other active ingredients for achieving specific effects, for example, bactericides, fungicides, nematicides, molluscicides or herbicides.

The compositions according to the invention are produced in a known manner, for example prior to mixing with the auxiliary/auxiliaries by grinding, screening and/or compressing the active ingredient, for example to give a particular particle size, and by intimately mixing and/or grinding the active ingredient with the auxiliary/auxiliaries.

The method according to the invention for controlling pests of the abovementioned type is carried out in a manner known per se to those skilled in the art, depending on the intended aims and prevailing circumstances, that is to say by spraying, wetting, atomizing, dusting, brushing on, seed dressing, scattering or pouring of the composition. Typical use concentrations are between 0.1 and 1000 ppm, preferably between 0.1 and 500 ppm of active ingredient. The application rate may vary within wide ranges and depends on the soil constitution, the type of application (foliar application; seed dressing; application in the seed furrow), the transgenic crop plant, the pest to be controlled, the climatic circumstances prevailing in each case, and other factors determined by the type of application, timing of application and target crop. The application rates per hectare are generally 1 to 2000 g of

nitroimino- or nitroguanidino-compound per hectare, in particular 10 to 1000 g/ha, preferably 10 to 500 g/ha, especially preferably 10 to 200 g/ha.

A preferred type of application in the field of crop protection within the scope of invention is application to the foliage of the plants (foliar application), it being possible to adapt frequency and rate of application to the risk of infestation with the pest in question. However, the active ingredient may also enter into the plants via the root system (systemic action), by drenching the site of the plants with a liquid composition or by incorporating the active ingredient in solid form into the site of the plants, for example into the soil, for example in the form of granules (soil application). In the case of paddy rice crops, such granules may be metered into the flooded paddy field.

The compositions according to invention are also suitable for protecting propagation material of transgenic plants, for example seed, such as fruits, tubers or kernels, or plant cuttings, from animal pests, in particular insects and representatives of the order Acarina. The propagation material can be treated with the composition prior to application, for example, seed being dressed prior to sowing. The active ingredient may also be applied to seed kernels (coating), either by soaking the kernels in a liquid composition or by coating them with a solid composition. The composition may also be applied to the site of application when applying the propagation material, for example into the seed furrow during sowing. These treatment methods for plant propagation material and the plant propagation material treated thus are a further subject of the invention.

Examples of formulations of nitroimino- or nitroguanidino-compounds which can be used in the method according to the invention, for instance solutions, granules, dusts, sprayable powders, emulsion concentrates, coated granules and suspension concentrates, are of the type as has been described in, for example, EP-A-580 553, Examples F1 to F10.

Biological examples

Table B

The following abreviations are used in the table:

Active Principle of transgenic plant: AP

Photorhabdus luminescens: PL Xenorhabdus nematophilus: XN

Proteinase Inhibitors: Plnh.

Plant lectins PLec. Agglutinins: Aggl.

3-Hydroxysteroid oxidase: HO

Cholesteroloxidase: CO

Chitinase: CH Glucanase: GL

Stilbensynthase SS

Table B:

	AP	Control of		AP	Control of
B.1	CryIA(a)	Adoxophyes spp.	B.18	CrylA(a)	Ostrinia nubilalis
B.2	CrylA(a)	Agrotis spp.	B .19	CrylA(a)	Pandemis spp.
B.3	CrylA(a)	Alabama	B.20	CrylA(a)	Pectinophora
		argillaceae			gossyp.
B.4	CrylA(a)	Anticarsia	B.21	CrylA(a)	Phyllocnistis citrella
		gemmatalis	B.22	CrylA(a)	Pieris spp.
B.5	CryIA(a)	Chilo spp.	B.23	CrylA(a)	Plutella xylostella
B.6	CryIA(a)	Clysia ambiguella	B.24	CrylA(a)	Scirpophaga spp.
B.7	CrylA(a)	Crocidolomia	B.25	CrylA(a)	Sesamia spp.
		binotalis	B.26	CrylA(a)	Sparganothis spp.
B.8	CrylA(a)	Cydia spp.	B.27	CrylA(a)	Spodoptera spp.
B.9	CryIA(a)	Diparopsis	B.28	CrylA(a)	Tortrix spp.
		castanea	B.29	CrylA(a)	Trichoplusia ni
B.10	CryIA(a)	Earias spp.	B.30	CrylA(a)	Agriotes spp.
B.11	CrylA(a)	Ephestia spp.	B.31	CryIA(a)	Anthonomus
B.12	CryIA(a)	Heliothis spp.			grandis
B.13	CrylA(a)	Hellula undalis	B.32	CrylA(a)	Curculio spp.
B.14	CrylA(a)	Keiferia	B.3 3	CrylA(a)	Diabrotica balteata
		lycopersicella	B.34	CrylA(a)	Leptinotarsa spp.
B.15	CryIA(a)	Leucoptera scitella	B.35	CrylA(a)	Lissorhoptrus spp.
B.16	CryIA(a)	Lithocollethis spp.	B.36	CrylA(a)	Otiorhynchus spp.
B.17	CrylA(a)	Lobesia botrana	B.37	CrylA(a)	Aleurothrixus spp.

	AP	Control of		AP	Control of
B.38	CrylA(a)	Aleyrodes spp.			argillaceae
B.39	CrylA(a)	Aonidiella spp.	B.6 9	CrylA(b)	Anticarsia
B.40	CrylA(a)	Aphididae spp.			gemmatalis
B .41	CrylA(a)	Aphis spp.	B.70	CrylA(b)	Chilo spp.
B.42	CrylA(a)	Bemisia tabaci	B.71	CrylA(b)	Clysia ambiguella
B.43	CrylA(a)	Empoasca spp.	B.72	CrylA(b)	Crocidolomia
B.44	CrylA(a)	Mycus spp.			binotalis
B.45	CrylA(a)	Nephotettix spp.	B.73	CrylA(b)	Cydia spp.
B.46	CrylA(a)	Nilaparvata spp.	B.74	CrylA(b)	Diparopsis
B.47	CrylA(a)	Pseudococcus spp.			castanea
B.48	CrylA(a)	Psylla spp.	B.75	CryIA(b)	Earias spp.
B.49	CrylA(a)	Quadraspidiotus	B.76	CrylA(b)	Ephestia spp.
		spp.	B.77	CryIA(b)	Heliothis spp.
B.50	CrylA(a)	Schizaphis spp.	B.78	CryIA(b)	Hellula undalis
B.51	CrylA(a)	Trialeurodes spp.	B.79	CryIA(b)	Keiferia
B.52	CrylA(a)	Lyriomyza spp.			iycopersicella
B.53	CrylA(a)	Oscinella spp.	B.80	CryIA(b)	Leucoptera scitella
B.54	CrylA(a)	Phorbia spp.	B.81	CrylA(b)	Lithocollethis spp.
B.55	CrylA(a)	Frankliniella spp.	B.82	CrylA(b)	Lobesia botrana
B.56	CrylA(a)	Thrips spp.	B.83	CrylA(b)	Ostrinia nubilalis
B.57	CrylA(a)	Scirtothrips aurantii	B.84	CrylA(b)	Pandemis spp.
B.58	CrylA(a)	Aceria spp.	B.85	CrylA(b)	Pectinophora
B.59	CrylA(a)	Aculus spp.			gossyp.
B.60	CrylA(a)	Brevipalpus spp.	B.86	CryIA(b)	Phyllocnistis citrella
B.61	CrylA(a)	Panonychus spp.	B.87	CrylA(b)	Pieris spp.
B.62	CrylA(a)	Phyllocoptruta spp.	B.8 8	CrylA(b)	Plutella xylostella
B.63	CrylA(a)	Tetranychus spp.	B.89	CrylA(b)	Scirpophaga spp.
B.64	CrylA(a)	Heterodera spp.	B.90	CrylA(b)	Sesamia spp.
B.65	CrylA(a)	Meloidogyne spp.	B.91	CrylA(b)	Sparganothis spp.
B.66	CrylA(b)	Adoxophyes spp.	B.92	CryIA(b)	Spodoptera spp.
B .67	CryIA(b)	Agrotis spp.	B.93	CrylA(b)	Tortrix spp.
B.68	CryIA(b)	Alabama	B.94	CryIA(b)	Trichoplusia ni

	AP	Control of		AP	Control of
B.95	CrylA(b)	Agriotes spp.	B.125	CrylA(b)	Brevipalpus spp.
B.96	CrylA(b)	Anthonomus	B.126	CrylA(b)	Panonychus spp.
	li .	grandis	B.127	CrylA(b)	Phyllocoptruta spp.
B.97	CrylA(b)	Curculio spp.	B.128	CrylA(b)	Tetranychus spp.
B .98	CrylA(b)	Diabrotica balteata	B.129	CrylA(b)	Heterodera spp.
B.99	CrylA(b)	Leptinotarsa spp.	B.130	CrylA(b)	Meloidogyne spp.
B.100	CrylA(b)	Lissorhoptrus spp.	B.131	CrylA(c)	Adoxophyes spp.
B.101	CrylA(b)	Otiorhynchus spp.	B.132	CrylA(c)	Agrotis spp.
B.102	CrylA(b)	Aleurothrixus spp.	B.133	CrylA(c)	Alabama
B.103	CryIA(b)	Aleyrodes spp.			argillaceae
B.104	CrylA(b)	Aonidiella spp.	B.134	CrylA(c)	Anticarsia
B.105	CrylA(b)	Aphididae spp.			gemmatalis
B.10 6	CrylA(b)	Aphis spp.	B.135	CrylA(c)	Chilo spp.
B.107	CrylA(b)	Bemisia tabaci	B.136	CryIA(c)	Clysia ambiguella
B.108	CrylA(b)	Empoasca spp.	B.137	CryIA(c)	Crocidolomia
B.109	CrylA(b)	Mycus spp.			binotalis
B.110	CrylA(b)	Nephotettix spp.	B.138	CrylA(c)	Cydia spp.
B.111	CrylA(b)	Nilaparvata spp.	B.139	CryIA(c)	Diparopsis
B.112	CrylA(b)	Pseudococcus spp.			castanea
B.113	CrylA(b)	Psylla spp.	B.140	CrylA(c)	Earias spp.
B.114	CryIA(b)	Quadraspidiotus	B.141	CrylA(c)	Ephestia spp.
		spp.	B.142	CryIA(c)	Heliothis spp.
B.115	CrylA(b)	Schizaphis spp.	B.143	CryIA(c)	Hellula undalis
B.116	CrylA(b)	Trialeurodes spp.	B.144	CryIA(c)	Keiferia
B.117	CrylA(b)	Lyriomyza spp.			lycopersicella
B.118	CrylA(b)	Oscinella spp.	B.145	CryIA(c)	Leucoptera scitella
B.119	CrylA(b)	Phorbia spp.	B.146	CrylA(c)	Lithocollethis spp.
B.120	CrylA(b)	Frankliniella spp.	B.147	CrylA(c)	Lobesia botrana
B.121	CryIA(b)	Thrips spp.	B.148	CrylA(c)	Ostrinia nubilalis
B.122	CrylA(b)	Scirtothrips aurantii	B.149	CrylA(c)	Pandemis spp.
B.123	CryIA(b)	Aceria spp.	B.150	CrylA(c)	Pectinophora
B.124	CryIA(b)	Aculus spp.			gossypiella.
		•			•

	AP	Control of		AP	Control of
B.151	CryIA(c)	Phyllocnistis citrella	B.181	CryIA(c)	Trialeurodes spp.
B.152	CryIA(c)	Pieris spp.	B.182	CryiA(c)	Lyriomyza spp.
B.153	CryIA(c)	Plutelia xylostella	B.183	CryIA(c)	Oscinella spp.
B.154	CryIA(c)	Scirpophaga spp.	B.184	CrylA(c)	Phorbia spp.
B.155	CryIA(c)	Sesamia spp.	B.185	CryIA(c)	Frankliniella spp.
B .156	CryIA(c)	Sparganothis spp.	B.186	CrylA(c)	Thrips spp.
B.157	CryIA(c)	Spodoptera spp.	B.187	CryIA(c)	Scirtothrips aurantii
B.158	CryIA(c)	Tortrix spp.	B.188	CryIA(c)	Aceria spp.
B.159	CrylA(c)	Trichoplusia ni	B.189	CryIA(c)	Aculus spp.
B.160	CrylA(c)	Agriotes spp.	B.190	CryIA(c)	Brevipalpus spp.
B.161	CryIA(c)	Anthonomus	B.191	CrylA(c)	Panonychus spp.
		grandis	B.192	CrylA(c)	Phyllocoptruta spp.
B.162	CryIA(c)	Curculio spp.	B.193	CrylA(c)	Tetranychus spp.
B.163	CryIA(c)	Diabrotica balteata	B.194	CryIA(c)	Heterodera spp.
B.164	CrylA(c)	Leptinotarsa spp.	B.195	CryIA(c)	Meloidogyne spp.
B.165	CrylA(c)	Lissorhoptrus spp.	B.196	CryllA	Adoxophyes spp.
B.166	CryIA(c)	Otiorhynchus spp.	B.197	CryllA	Agrotis spp.
B.167	CryIA(c)	Aleurothrixus spp.	B.198	CryllA	Alabama
B.168	CryIA(c)	Aleyrodes spp.			argillaceae
B.169	CryIA(c)	Aonidiella spp.	B.199	CryllA	Anticarsia
B.170	CryIA(c)	Aphididae spp.			gemmatalis
B.171	CryIA(c)	Aphis spp.	B.200	CryllA	Chilo spp.
B.172	CryIA(c)	Bemisia tabaci	B.201	CryllA	Clysia ambiguella
B.173	CrylA(c)	Empoasca spp.	B.202	CryllA	Crocidolomia
B.174	CrylA(c)	Mycus spp.			binotalis
B.175	CrylA(c)	Nephotettix spp.	B.203	CryllA	Cydia spp.
B.176	CryIA(c)	Nilaparvata spp.	B.204	CryllA	Diparopsis
B.177	CryIA(c)	Pseudococcus spp.			castanea
B.17 8	CryIA(c)	Psylla spp.	B.205	CryllA	Earias spp.
B .179	CrylA(c)	Quadraspidiotus	B.206	CryllA	Ephestia spp.
		spp.	B.207	CryllA	Heliothis spp.
B.180	CryIA(c)	Schizaphis spp.	B.208	CryllA	Hellula undalis

	AP	Control of		AP	Control of
B.209	CryllA	Keiferia	B.238	CryllA	Empoasca spp.
	Ì	lycopersicella	B.239	CryllA	Mycus spp.
B.210	CryllA	Leucoptera scitella	B.24 0	CryllA	Nephotettix spp.
B.211	CryllA	Lithocollethis spp.	B.241	CryllA	Nilaparvata spp.
B.212	CryllA	Lobesia botrana	B.242	CryllA	Pseudococcus spp.
B.213	CryllA	Ostrinia nubilalis	B.24 3	CryllA	Psyila spp.
B.214	CryllA	Pandemis spp.	B.244	CryllA	Quadraspidiotus
B.215	CryllA	Pectinophora			spp.
		gossyp.	B.245	CryllA	Schizaphis spp.
B.216	CryllA	Phyllocnistis citrella	B.246	CryllA	Trialeurodes spp.
B.217	CryllA	Pieris spp.	B.247	CryllA	Lyriomyza spp.
B.218	CryllA	Plutella xylostella	B.248	CryllA	Oscinella spp.
B.219	CryllA	Scirpophaga spp.	B.249	CryllA	Phorbia spp.
B.220	CryllA	Sesamia spp.	B.250	CryllA	Frankliniella spp.
B.221	CryllA	Sparganothis spp.	B.251	CryllA	Thrips spp.
B.222	CryllA	Spodoptera spp.	B.252	CryllA	Scirtothrips aurantii
B.223	CryllA	Tortrix spp.	B.253	CryllA	Aceria spp.
B.224	CryllA	Trichoplusia ni	B.254	CryllA	Aculus spp.
B.225	CryllA	Agriotes spp.	B.255	CryllA	Brevipalpus spp.
B.226	CryllA	Anthonomus	B.256	CryllA	Panonychus spp.
		grandis	B.257	CryllA	Phyllocoptruta spp.
B.227	CryllA	Curculio spp.	B.258	CryllA	Tetranychus spp.
B.228	CryllA	Diabrotica balteata	B.259	CryllA	Heterodera spp.
B.229	CryllA	Leptinotarsa spp.	B.260	CryllA	Meloidogyne spp.
B.230	CryllA	Lissorhoptrus spp.	B.261	CryllIA	Adoxophyes spp.
B.231	CryllA	Otiorhynchus spp.	B.262	CryllIA	Agrotis spp.
B.232	CryllA	Aleurothrixus spp.	B.26 3	CrylliA	Alabama
B.233	CryllA	Aleyrodes spp.			argillaceae
B.234	CryllA	Aonidiella spp.	B.264	CrylllA	Anticarsia
B.235	CryllA	Aphididae spp.			gemmatalis
B.236	CryllA	Aphis spp.	B.265	CrylllA	Chilo spp.
B.237	CryllA	Bemisia tabaci	B.266	CryllIA	Clysia ambiguella

	AP	Control of		AP	Control of
B.267	CrylliA	Crocidolomia	B.294	CrylliA	Leptinotarsa spp.
		binotalis	B.295	CrylliA	Lissorhoptrus spp.
B.268	CryllA	Cydia spp.	B.296	CrylliA	Otiorhynchus spp.
B.26 9	CrylliA	Diparopsis	B.297	CrylliA	Aleurothrixus spp.
		castanea	B.298	CrylliA	Aleyrodes spp.
B.270	CrylliA	Earias spp.	B.299	CryillA	Aonidiella spp.
B.271	CrylliA	Ephestia spp.	B.300	CrylliA	Aphididae spp.
B.272	CrylliA	Heliothis spp.	B.301	CrylliA	Aphis spp.
B.273	CrylllA	Hellula undalis	B.302	CrylliA	Bemisia tabaci
B.274	CryllA	Keiferia	B.303	CrylllA	Empoasca spp.
		lycopersicella	B.304	CrylliA	Mycus spp.
B.275	CrylllA	Leucoptera scitella	B.305	CryllA	Nephotettix spp.
B.276	CrylliA	Lithocollethis spp.	B.306	CrylliA	Nilaparvata spp.
B.277	CrylliA	Lobesia botrana	B.307	CrylliA	Pseudococcus spp.
B.278	CryllA	Ostrinia nubilalis	B.308	CrylliA	Psylla spp.
B.279	CrylliA	Pandemis spp.	B.309	CrylllA	Quadraspidiotus
B.280	CryIIIA	Pectinophora			spp.
		gossyp.	B.310	CrylliA	Schizaphis spp.
B.281	CrylllA	Phyllocnistis citrella	B.311	CryllA	Trialeurodes spp.
B.282	CrylllA	Pieris spp.	B.312	CrylliA	Lyriomyza spp.
B.283	CryllA	Plutella xylostella	B.313	CrylliA	Oscinella spp.
B.284	CryllA	Scirpophaga spp.	B.314	CrylliA	Phorbia spp.
B.285	CrylllA	Sesamia spp.	B.315	CrylliA	Frankliniella spp.
B.286	CrylliA	Sparganothis spp.	B.316	CrylliA	Thrips spp.
B.287	CrylllA	Spodoptera spp.	B.317	CrylliA	Scirtothrips aurantii
B.288	CrylliA	Tortrix spp.	B.318	CrylliA	Aceria spp.
B.289	CrylliA	Trichoplusia ni	B.319	CrylliA	Aculus spp.
B.290	CryllA	Agriotes spp.	B.320	CrylliA	Brevipalpus spp.
B.291	CrylliA	Anthonomus	B.321	CrylliA	Panonychus spp.
		grandis	B.322	CrylliA	Phyliocoptruta spp.
B.292	CryllIA	Curculio spp.	B.323	CrylllA	Tetranychus spp.
B.293	CrylliA	Diabrotica balteata	B.324	CrylliA	Heterodera spp.
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	AP	Control of		AP	Control of
B.325	CrylliA	Meloidogyne spp.	B.351	CrylllB2	Sparganothis spp.
B.326	CrylllB2	Adoxophyes spp.	B.352	CrylllB2	Spodoptera spp.
B.327	CrylliB2	Agrotis spp.	B.353	CrylllB2	Tortrix spp.
B.328	CrylllB2	Alabama	B.354	CrylllB2	Trichoplusia ni
		argillaceae	B.355	CrylllB2	Agriotes spp.
B.329	CrylllB2	Anticarsia	B.356	CrylllB2	Anthonomus
		gemmatalis			grandis
B.330	CrylllB2	Chilo spp.	B.357	CrylllB2	Curculio spp.
B.331	CrylllB2	Clysia ambiguella	B.358	CrylllB2	Diabrotica balteata
B.332	CrylliB2	Crocidolomia	B.359	CrylllB2	Leptinotarsa spp.
		binotalis	B.360	CrylllB2	Lissorhoptrus spp.
B.333	CrylllB2	Cydia spp.	B.361	CrylllB2	Otiorhynchus spp.
B.334	CrylllB2	Diparopsis	B.362	CrylliB2	Aleurothrixus spp.
		castanea	B.363	CrylllB2	Aleyrodes spp.
B.335	CrylllB2	Earias spp.	B.364	CrylllB2	Aonidiella spp.
B.336	CrylllB2	Ephestia spp.	B.365	CrylllB2	Aphididae spp.
B.337	CrylllB2	Heliothis spp.	B.366	CrylllB2	Aphis spp.
B.338	CryIIIB2	Hellula undalis	B.367	CrylllB2	Bemisia tabaci
B.339	CrylllB2	Keiferia	B.368	CrylliB2	Empoasca spp.
		lycopersicella	B.369	CrylliB2	Mycus spp.
B.340	CrylllB2	Leucoptera scitella	B.370	CrylliB2	Nephotettix spp.
B.341	CrylllB2	Lithocollethis spp.	B.371	CrylllB2	Nilaparvata spp.
B.342	CrylllB2	Lobesia botrana	B.372	CryllIB2	Pseudococcus spp.
B.343	CrylllB2	Ostrinia nubilalis	B.373	CrylllB2	Psylla spp.
B.344	CrylllB2	Pandemis spp.	B.374	CrylllB2	Quadraspidiotus
B.345	CrylllB2	Pectinophora			spp.
		gossyp.	B.375	CrylllB2	Schizaphis spp.
B.346	CrylllB2	Phyllocnistis citrella	B.376	CrylliB2	Trialeurodes spp.
B.347	CrylllB2	Pieris spp.	B.377	CrylllB2	Lyriomyza spp.
B.348	CrylllB2	Plutelia xylostelia	B.378	CrylllB2	Oscinella spp.
B.349	CrylllB2	Scirpophaga spp.	B.379	CrylllB2	Phorbia spp.
B.350	CrylllB2	Sesamia spp.	B.380	CrylllB2	Frankliniella spp.
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	AP	Control of		AP	Control of
B.381	CrylllB2	Thrips spp.	B.408	CytA	Ostrinia nubilalis
B.382	CrylllB2	Scirtothrips aurantii	B.409	CytA	Pandemis spp.
B.383	CrylllB2	Aceria spp.	B.410	CytA	Pectinophora
B.384	CrylllB2	Aculus spp.			gossyp.
B.385	CrylllB2	Brevipalpus spp.	B.411	CytA	Phyllocnistis citrella
B.386	CrylllB2	Panonychus spp.	B.412	CytA	Pieris spp.
B.387	CrylllB2	Phyllocoptruta spp.	B.413	CytA	Plutella xylostella
B.388	CrylllB2	Tetranychus spp.	B.414	CytA	Scirpophaga spp.
B.389	CrylllB2	Heterodera spp.	B.415	CytA	Sesamia spp.
B.390	CrylllB2	Meloidogyne spp.	B.416	CytA	Sparganothis spp.
B.391	CytA	Adoxophyes spp.	B.417	CytA	Spodoptera spp.
B.392	CytA	Agrotis spp.	B.418	CytA	Tortrix spp.
B.393	CytA	Alabama	B.419	CytA	Trichoplusia ni
		argillaceae	B.420	CytA	Agriotes spp.
B.394	CytA	Anticarsia	B.421	CytA	Anthonomus
		gemmatalis			grandis
B.395	CytA	Chilo spp.	B.422	CytA	Curculio spp.
B.396	CytA	Clysia ambiguella	B.423	CytA	Diabrotica balteata
B.397	CytA	Crocidolomia	B.424	CytA	Leptinotarsa spp.
		binotalis	B.425	CytA	Lissorhoptrus spp.
B.398	CytA	Cydia spp.	B.426	CytA	Otiorhynchus spp.
B.399	CytA	Diparopsis	B.427	CytA	Aleurothrixus spp.
		castanea	B.428	CytA	Aleyrodes spp.
B.400	CytA	Earias spp.	B.429	CytA	Aonidiella spp.
B.401	CytA	Ephestia spp.	B.430	CytA	Aphididae spp.
B.402	CytA	Heliothis spp.	B.431	CytA	Aphis spp.
B.403	CytA	Hellula undalis	B.432	CytA	Bemisia tabaci
B.404	CytA	Keiferia	B.433	CytA	Empoasca spp.
		lycopersicella	B.434	CytA	Mycus spp.
B.405	CytA	Leucoptera scitella	B.435	CytA	Nephotettix spp.
B.406	CytA	Lithocollethis spp.	B.436	CytA	Nilaparvata spp.
B.407	CytA	Lobesia botrana	B.437	CytA	Pseudococcus spp.

	AP	Control of		AP	Control of
B.438	CytA	Psylla spp.	B.465	VIP3	Earias spp.
B.439	CytA	Quadraspidiotus	B.466	VIP3	Ephestia spp.
		spp.	B.467	VIP3	Heliothis spp.
B .440	CytA	Schizaphis spp.	B.46 8	VIP3	Hellula undalis
B.441	CytA	Trialeurodes spp.	B.469	VIP3	Keiferia
B.442	CytA	Lyriomyza spp.			lycopersicella
B.443	CytA	Oscinella spp.	B.470	VIP3	Leucoptera scitella
B.444	CytA	Phorbia spp.	B.471	VIP3	Lithocollethis spp.
B.445	CytA	Frankliniella spp.	B.472	VIP3	Lobesia botrana
B.446	CytA	Thrips spp.	B.473	VIP3	Ostrinia nubilalis
B.447	CytA	Scirtothrips aurantii	B.474	VIP3	Pandemis spp.
B.448	CytA	Aceria spp.	B.475	VIP3	Pectinophora
B.449	CytA	Aculus spp.			gossyp.
B.450	CytA	Brevipalpus spp.	B.47 6	VIP3	Phyllocnistis citrella
B.451	CytA	Panonychus spp.	B.477	VIP3	Pieris spp.
B.452	CytA	Phyllocoptruta spp.	B.478	VIP3	Plutella xylostella
B.453	CytA	Tetranychus spp.	B.479	VIP3	Scirpophaga spp.
B.454	CytA	Heterodera spp.	B.480	VIP3	Sesamia spp.
B.455	CytA	Meloidogyne spp.	B.481	VIP3	Sparganothis spp.
B.456	VIP3	Adoxophyes spp.	B.482	VIP3	Spodoptera spp.
B.457	VIP3	Agrotis spp.	B.483	VIP3	Tortrix spp.
B.458	VIP3	Alabama	B.484	VIP3	Trichoplusia ni
		argillaceae	B.485	VIP3	Agriotes spp.
B.459	VIP3	Anticarsia	B.486	VIP3	Anthonomus
		gemmatalis			grandis
B.460	VIP3	Chilo spp.	B.487	VIP3	Curculio spp.
B.461	VIP3	Clysia ambiguella	B.488	VIP3	Diabrotica balteata
B.462	VIP3	Crocidolomia	B.489	VIP3	Leptinotarsa spp.
		binotalis	B.490	VIP3	Lissorhoptrus spp.
B.463	VIP3	Cydia spp.	B.491	VIP3	Otiorhynchus spp.
B.46 4	VIP3	Diparopsis	B.492	VIP3	Aleurothrixus spp.
		castanea	B.493	VIP3	Aleyrodes spp.

	AP	Control of		AP	Control of
B.494	VIP3	Aonidiella spp.	B.524	GL	Anticarsia
B.495	VIP3	Aphididae spp.		·	gemmatalis
B.496	VIP3	Aphis spp.	B.525	GL	Chilo spp.
B.497	VIP3	Bemisia tabaci	B.526	GL	Clysia ambiguella
B.498	VIP3	Empoasca spp.	B.527	GL	Crocidolomia
B.499	VIP3	Mycus spp.			binotalis
B.500	VIP3	Nephotettix spp.	B.528	GL	Cydia spp.
B.501	VIP3	Nilaparvata spp.	B.529	GL	Diparopsis
B.502	VIP3	Pseudococcus spp.			castanea
B.503	VIP3	Psylla spp.	B.530	GL	Earias spp.
B.504	VIP3	Quadraspidiotus	B.531	GL	Ephestia spp.
		spp.	B.532	GL	Heliothis spp.
B.505	VIP3	Schizaphis spp.	B.533	GL	Hellula undalis
B.506	VIP3	Trialeurodes spp.	B.534	GL	Keiferia
B.507	VIP3	Lyriomyza spp.			lycopersicella
B.508	VIP3	Oscinella spp.	B.535	GL	Leucoptera scitella
B.50 9	VIP3	Phorbia spp.	B.536	GL	Lithocollethis spp.
B.510	VIP3	Frankliniella spp.	B.537	GL	Lobesia botrana
B.511	VIP3	Thrips spp.	B.538	GL	Ostrinia nubilalis
B.512	VIP3	Scirtothrips aurantii	B.53 9	GL	Pandemis spp.
B.513	VIP3	Aceria spp.	B.540	GL	Pectinophora
B.514	VIP3	Aculus spp.			gossyp.
B.515	VIP3	Brevipalpus spp.	B.541	GL	Phyllocnistis citrella
B.516	VIP3	Panonychus spp.	B.542	GL	Pieris spp.
B.517	VIP3	Phyllocoptruta spp.	B.543	GL	Plutelia xylostelia
B.518	VIP3	Tetranychus spp.	B.544	GL	Scirpophaga spp.
B.519	VIP3	Heterodera spp.	B.545	GL	Sesamia spp.
B.520	VIP3	Meloidogyne spp.	B.546	GL	Sparganothis spp.
B.521	GL	Adoxophyes spp.	B.547	GL	Spodoptera spp.
B.522	GL	Agrotis spp.	B.548	GL	Tortrix spp.
B.523	GL	Alabama	B.549	GL	Trichoplusia ni
		argillaceae	B.550	GL	Agriotes spp.

	AP	Control of		AP	Control of
B.551	GL	Anthonomus	B.581	GL	Panonychus spp.
		grandis	B.582	GL	Phyllocoptruta spp.
B.552	GL	Curculio spp.	B.583	GL	Tetranychus spp.
B.553	GL	Diabrotica balteata	B.584	GL	Heterodera spp.
B.554	GL	Leptinotarsa spp.	B.5 85	GL	Meloidogyne spp.
B.555	GL	Lissorhoptrus spp.	B.586	PL	Adoxophyes spp.
B.556	GL	Otiorhynchus spp.	B.587	PL	Agrotis spp.
B.557	GL	Aleurothrixus spp.	B.588	PL	Alabama
B.558	GL	Aleyrodes spp.			argillaceae
B.559	GL	Aonidiella spp.	B.589	PL	Anticarsia
B.560	GL	Aphididae spp.			gemmatalis
B.561	GL	Aphis spp.	B.590	PL	Chilo spp.
B.562	GL	Bemisia tabaci	B.591	PL	Clysia ambiguella
B.563	GL	Empoasca spp.	B.592	PL	Crocidolomia
B.564	GL	Mycus spp.			binotalis
B.565	GL	Nephotettix spp.	B.593	PL	Cydia spp.
B.566	GL	Nilaparvata spp.	B.594	PL	Diparopsis
B.567	GL	Pseudococcus spp.			castanea
B.568	GL	Psylla spp.	B.595	PL	Earias spp.
B.569	GL	Quadraspidiotus	B.596	PL	Ephestia spp.
		spp.	B.597	PL	Heliothis spp.
B.570	GL	Schizaphis spp.	B.598	PL	Hellula undalis
B.571	GL	Trialeurodes spp.	B.599	PL	Keiferia
B.572	GL	Lyriomyza spp.			lycopersicella
B.573	GL	Oscinella spp.	B.600	PL	Leucoptera scitella
B.574	GL	Phorbia spp.	B.601	PL	Lithocollethis spp.
B.575	GL	Frankliniella spp.	B.602	PL	Lobesia botrana
B.576	GL	Thrips spp.	B.603	PL	Ostrinia nubilalis
B.577	GL	Scirtothrips aurantii	B.604	PL	Pandemis spp.
B.578	GL	Aceria spp.	B.605	PL	Pectinophora
B.579	GL	Aculus spp.			gossyp.
B.580	GL	Brevipalpus spp.	B.606	PL	Phyllocnistis citrella

	AP	Control of		AP	Control of
B.607	PL	Pieris spp.	B.637	PL	Lyriomyza spp.
B.608	PL	Plutella xylostella	B.638	PL	Oscinella spp.
B.609	PL	Scirpophaga spp.	B.639	PL	Phorbia spp.
B.610	PL	Sesamia spp.	B.64 0	PL	Frankliniella spp.
B.611	PL	Sparganothis spp.	B.641	PL	Thrips spp.
B.612	PL	Spodoptera spp.	B.642	PL	Scirtothrips aurantii
B.613	PL	Tortrix spp.	B.643	PL	Aceria spp.
B.614	PL	Trichoplusia ni	B.644	PL	Aculus spp.
B.615	PL	Agriotes spp.	B.645	PL	Brevipalpus spp.
B.616	PL	Anthonomus	B.646	PL	Panonychus spp.
		grandis	B.647	PL	Phyliocoptruta spp.
B.617	PL	Curculio spp.	B.648	PL	Tetranychus spp.
B.618	PL	Diabrotica balteata	B.649	PL	Heterodera spp.
B.619	PL	Leptinotarsa spp.	B.650	PL	Meloidogyne spp.
B.620	PL	Lissorhoptrus spp.	B.651	XN	Adoxophyes spp.
B.621	PL	Otiorhynchus spp.	B.652	XN	Agrotis spp.
B.622	PL	Aleurothrixus spp.	B.653	XN	Alabama
B.623	PL	Aleyrodes spp.			argillaceae
B.624	PL	Aonidiella spp.	B.654	XN	Anticarsia
B.625	PL	Aphididae spp.			gemmatalis
B.626	PL	Aphis spp.	B.655	XN	Chilo spp.
B.627	PL	Bemisia tabaci	B.656	XN	Clysia ambiguella
B.628	PL	Empoasca spp.	B.657	XN	Crocidolomia
B.629	PL	Mycus spp.		ļ	binotalis
B.630	PL	Nephotettix spp.	B.658	XN	Cydia spp.
B.631	PL	Nilaparvata spp.	B.659	XN	Diparopsis
B.632	PL	Pseudococcus spp.			castanea
B.633	PL	Psylla spp.	B.660	XN	Earias spp.
B.634	PL	Quadraspidiotus	B.661	XN	Ephestia spp.
		spp.	B.662	XN	Heliothis spp.
B.635	PL	Schizaphis spp.	B.663	XN	Hellula undalis
B.636	PL	Trialeurodes spp.	B.664	XN	Keiferia

	AP	Control of		AP	Control of
		lycopersicella	B.694	XN	Mycus spp.
B.665	XN	Leucoptera scitella	B.695	XN	Nephotettix spp.
B.66 6	XN	Lithocollethis spp.	B.696	XN	Nilaparvata spp.
B.667	XN	Lobesia botrana	B.697	XN	Pseudococcus spp.
B.668	XN	Ostrinia nubilalis	B.698	XN	Psylla spp.
B.6 69	XN	Pandemis spp.	B.699	XN	Quadraspidiotus
B .670	XN	Pectinophora			spp.
		gossyp.	B.700	XN	Schizaphis spp.
B.671	XN	Phyllocnistis citrella	B.701	XN	Trialeurodes spp.
B.672	XN	Pieris spp.	B.702	XN	Lyriomyza spp.
B.673	XN	Plutella xylostella	B.703	XN	Oscinella spp.
B.674	XN	Scirpophaga spp.	B.704	XN	Phorbia spp.
B.675	XN	Sesamia spp.	B.705	XN	Frankliniella spp.
B.676	XN	Sparganothis spp.	B.706	XN	Thrips spp.
B.677	XN	Spodoptera spp.	B.70 7	XN	Scirtothrips aurantii
B.678	XN	Tortrix spp.	B.708	XN	Aceria spp.
B.679	XN	Trichoplusia ni	B.709	XN	Aculus spp.
B.680	XN	Agriotes spp.	B.710	XN	Brevipalpus spp.
B.681	XN	Anthonomus	B.711	XN	Panonychus spp.
		grandis	B.712	XN	Phyllocoptruta spp.
B.682	XN	Curculio spp.	B.713	XN	Tetranychus spp.
B.683	XN	Diabrotica balteata	B.714	XN	Heterodera spp.
B.684	XN	Leptinotarsa spp.	B.715	XN	Meloidogyne spp.
B.685	XN	Lissorhoptrus spp.	B.716	Pinh.	Adoxophyes spp.
B.686	XN	Otiorhynchus spp.	B.717	Pinh.	Agrotis spp.
B.687	XN	Aleurothrixus spp.	B.718	Pinh.	Alabama
B.688	XN	Aleyrodes spp.			argillaceae
B.68 9	XN	Aonidiella spp.	B.719	Pinh.	Anticarsia
B.69 0	XN	Aphididae spp.			gemmatalis
B.691	XN	Aphis spp.	B.720	Pinh.	Chilo spp.
B.692	XN	Bemisia tabaci	B.721	Pinh.	Clysia ambiguella
B.693	XN	Empoasca spp.	B.722	Pinh.	Crocidolomia
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	AP	Control of		AP	Control of
		binotalis	B.750	Pinh.	Lissorhoptrus spp.
B.723	Pinh.	Cydia spp.	B.751	Pinh.	Otiorhynchus spp.
B.724	Pinh.	Diparopsis	B.752	Pinh.	Aleurothrixus spp.
		castanea	B.753	Pinh.	Aleyrodes spp.
B.725	Pinh.	Earias spp.	B.754	Pinh.	Aonidiella spp.
B.726	Pinh.	Ephestia spp.	B.755	Pinh.	Aphididae spp.
B.727	Plnh.	Heliothis spp.	B.756	Pinh.	Aphis spp.
B.728	Pinh.	Hellula undalis	B.757	Pinh.	Bemisia tabaci
B.729	Pinh.	Keiferia	B.758	Pinh.	Empoasca spp.
		lycopersicella	B.759	Pinh.	Mycus spp.
B.730	Pinh.	Leucoptera scitella	B.760	Pinh.	Nephotettix spp.
B.731	Pinh.	Lithocollethis spp.	B.761	Pinh.	Nilaparvata spp.
B.732	Pinh.	Lobesia botrana	B.762	Pinh.	Pseudococcus spp.
B.733	Pinh.	Ostrinia nubilalis	B.763	Plnh.	Psylla spp.
B.734	Pinh.	Pandemis spp.	B.764	Pinh.	Quadraspidiotus
B.735	Pinh.	Pectinophora			spp.
		gossyp.	B.765	Pinh.	Schizaphis spp.
B.736	Pinh.	Phyllocnistis citrella	B.766	Pinh.	Trialeurodes spp.
B.737	Pinh.	Pieris spp.	B.767	Pinh.	Lyriomyza spp.
B.738	Pinh.	Plutella xylostella	B.768	Pinh.	Oscinella spp.
B.739	Pinh.	Scirpophaga spp.	B.769	Pinh.	Phorbia spp.
B.740	Pinh.	Sesamia spp.	B.770	Pinh.	Frankliniella spp.
B.741	Pinh.	Sparganothis spp.	B.771	Pinh.	Thrips spp.
B.742	Pinh.	Spodoptera spp.	B.772	Pinh.	Scirtothrips aurantii
B.74 3	Plnh.	Tortrix spp.	B.773	Pinh.	Aceria spp.
B.744	Pinh.	Trichoplusia ni	B.774	Plnh.	Aculus spp.
B.745	Pinh.	Agriotes spp.	B.775	Pinh.	Brevipalpus spp.
B.746	Pinh.	Anthonomus	B.776	Pinh.	Panonychus spp.
		grandis	B.777	Pinh.	Phyllocoptruta spp.
B .747	Plnh.	Curculio spp.	B.778	Pinh.	Tetranychus spp.
B.748	Pinh.	Diabrotica balteata	B.779	Pinh.	Heterodera spp.
B.749	Pinh.	Leptinotarsa spp.	B.780	Pinh.	Meloidogyne spp.

	AP	Control of		AP	Control of
B.781	PLec.	Adoxophyes spp.	B.807	PLec.	Spodoptera spp.
B.782	PLec.	Agrotis spp.	B.808	PLec.	Tortrix spp.
B.783	PLec.	Alabama	B.809	PLec.	Trichoplusia ni
		argillaceae	B.810	PLec.	Agriotes spp.
B.784	PLec.	Anticarsia	B.811	PLec.	Anthonomus
		gemmatalis			grandis
B.785	PLec.	Chilo spp.	B.812	PLec.	Curculio spp.
B.786	PLec.	Clysia ambiguella	B.813	PLec.	Diabrotica balteata
B.787	PLec.	Crocidolomia	B.814	PLec.	Leptinotarsa spp.
		binotalis	B.815	PLec.	Lissorhoptrus spp.
B.788	PLec.	Cydia spp.	B.816	PLec.	Otiorhynchus spp.
B.789	PLec.	Diparopsis	B.817	PLec.	Aleurothrixus spp.
		castanea	B.818	PLec.	Aleyrodes spp.
B.790	PLec.	Earias spp.	B.8 19	PLec.	Aonidiella spp.
B.791	PLec.	Ephestia spp.	B.820	PLec.	Aphididae spp.
B.792	PLec.	Heliothis spp.	B.821	PLec.	Aphis spp.
B.793	PLec.	Hellula undalis	B.822	PLec.	Bemisia tabaci
B.794	PLec.	Keiferia	B.823	PLec.	Empoasca spp.
		lycopersicella	B.824	PLec.	Mycus spp.
B.795	PLec.	Leucoptera scitella	B.825	PLec.	Nephotettix spp.
B.796	PLec.	Lithocollethis spp.	B.826	PLec.	Nilaparvata spp.
B.797	PLec.	Lobesia botrana	B.827	PLec.	Pseudococcus spp.
B.798	PLec.	Ostrinia nubilalis	B.828	PLec.	Psylia spp.
B.799	PLec.	Pandemis spp.	B.829	PLec.	Quadraspidiotus
B.800	PLec.	Pectinophora			spp.
		gossyp.	B.830	PLec.	Schizaphis spp.
B.801	PLec.	Phyllocnistis citrella	B.831	PLec.	Trialeurodes spp.
B.802	PLec.	Pieris spp.	B.832	PLec.	Lyriomyza spp.
B.803	PLec.	Plutella xylostella	B.833	PLec.	Oscinella spp.
B.804	PLec.	Scirpophaga spp.	B.834	PLec.	Phorbia spp.
B.805	PLec.	Sesamia spp.	B.835	PLec.	Frankliniella spp.
B.806	PLec.	Sparganothis spp.	B.836	PLec.	Thrips spp.
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	AP	Control of		AP	Control of
B.837	PLec.	Scirtothrips aurantii	B.864	Aggl.	Pandemis spp.
B.838	PLec.	Aceria spp.	B.865	Aggl.	Pectinophora
B.839	PLec.	Aculus spp.			gossyp.
B.840	PLec.	Brevipalpus spp.	B.866	Aggl.	Phyllocnistis citrella
B.841	PLec.	Panonychus spp.	B.867	Aggl.	Pieris spp.
B.842	PLec.	Phyllocoptruta spp.	B.868	Aggi.	Pluteiia xylostella
B.843	PLec.	Tetranychus spp.	B.869	Aggl.	Scirpophaga spp.
B.844	PLec.	Heterodera spp.	B.870	Aggl.	Sesamia spp.
B.845	PLec.	Meloidogyne spp.	B.871	Aggl.	Sparganothis spp.
B.846	Aggl.	Adoxophyes spp.	B.872	Aggl.	Spodoptera spp.
B.847	Aggl.	Agrotis spp.	B.873	Aggl.	Tortrix spp.
B.848	Aggl.	Alabama	B.874	Aggl.	Trichoplusia ni
		argillaceae	B.875	Aggl.	Agriotes spp.
B.849	Aggl.	Anticarsia	B.876	Aggl.	Anthonomus
		gemmatalis			grandis
B.850	Aggl.	Chilo spp.	B.877	Aggl.	Curculio spp.
B.851	Aggl.	Clysia ambiguella	B.878	Aggl.	Diabrotica balteata
B.852	Aggl.	Crocidolomia	B.879	Aggl.	Leptinotarsa spp.
		binotalis	B.880	Aggl.	Lissorhoptrus spp.
B.853	Aggl.	Cydia spp.	B.881	Aggl.	Otiorhynchus spp.
B.854	Aggl.	Diparopsis	B.882	Aggl.	Aleurothrixus spp.
		castanea	B.883	Aggl.	Aleyrodes spp.
B.855	Aggl.	Earias spp.	B.884	Aggl.	Aonidiella spp.
B.856	Aggl.	Ephestia spp.	B.885	Aggl.	Aphididae spp.
B.857	Aggl.	Heliothis spp.	B.886	Aggl.	Aphis spp.
B.858	Aggl.	Hellula undalis	B.887	Aggl.	Bemisia tabaci
B.859	Aggl.	Keiferia	B.888	Aggl.	Empoasca spp.
		lycopersicella	B.8 89	Aggl.	Mycus spp.
B.860	Aggl.	Leucoptera scitella	B.890	Aggl.	Nephotettix spp.
B.861	Aggl.	Lithocollethis spp.	B.891	Aggi.	Nilaparvata spp.
B.862	Aggl.	Lobesia botrana	B.892	Aggl.	Pseudococcus spp.
B.863	Aggl.	Ostrinia nubilalis	B.893	Aggl.	Psylla spp.

	AP	Control of		AP	Control of
B.894	Aggl.	Quadraspidiotus	B.921	СО	Ephestia spp.
		spp.	B.922	co	Heliothis spp.
B.895	Aggl.	Schizaphis spp.	B.923	co	Hellula undalis
B.896	Aggl.	Trialeurodes spp.	B.924	co	Keiferia
B.897	Aggl.	Lyriomyza spp.			lycopersicella
B.898	Aggi.	Oscinella spp.	B.925	co	Leucoptera scitella
B.899	Aggl.	Phorbia spp.	B.926	co	Lithocollethis spp.
B.90 0	Aggl.	Frankliniella spp.	B.927	co	Lobesia botrana
B.901	Aggl.	Thrips spp.	B.928	co	Ostrinia nubilalis
B.902	Aggl.	Scirtothrips aurantii	B.929	co	Pandemis spp.
B.903	Aggl.	Aceria spp.	B.930	co	Pectinophora
B.904	Aggl.	Aculus spp.			gossyp.
B.905	Aggl.	Brevipalpus spp.	B.931	co	Phyllocnistis citrella
B.906	Aggl.	Panonychus spp.	B.932	co	Pieris spp.
B.907	Aggl.	Phyllocoptruta spp.	B.93 3	co	Plutella xylostella
B.908	Aggl.	Tetranychus spp.	B.934	co	Scirpophaga spp.
B.909	Aggl.	Heterodera spp.	B.935	co	Sesamia spp.
B.910	Aggl.	Meloidogyne spp.	B.93 6	co	Sparganothis spp.
B.911	co	Adoxophyes spp.	B.937	co	Spodoptera spp.
B.912	co	Agrotis spp.	B.93 8	co	Tortrix spp.
B .913	co	Alabama	B.939	co	Trichoplusia ni
		argillaceae	B.940	co	Agriotes spp.
B.914	co	Anticarsia	B.941	co	Anthonomus
		gemmatalis			grandis
B.915	co	Chilo spp.	B.942	co	Curculio spp.
B.916	co	Clysia ambiguella	B.943	co	Diabrotica balteata
B.917	co	Crocidolomia	B.944	co	Leptinotarsa spp.
		binotalis	B.945	co	Lissorhoptrus spp.
B.918	co	Cydia spp.	B.946	co	Otiorhynchus spp.
B.919	co	Diparopsis	B.947	co	Aleurothrixus spp.
		castanea	B.948	co	Aleyrodes spp.
B.920	CO	Earias spp.	B.94 9	co	Aonidiella spp.

	AP	Control of		AP	Control of
B.950	co	Aphididae spp.			gemmatalis
B.951	co	Aphis spp.	B.980	СН	Chilo spp.
B.952	co	Bemisia tabaci	B.981	СН	Clysia ambiguella
B.953	co	Empoasca spp.	B.982	СН	Crocidolomia
B.954	co	Mycus spp.			binotalis
B.955	co	Nephotettix spp.	B.983	СН	Cydia spp.
B.956	co	Nilaparvata spp.	B.984	СН	Diparopsis
B.957	co	Pseudococcus spp.			castanea
B.958	co	Psylla spp.	B.985	СН	Earias spp.
B.959	co	Quadraspidiotus	B.986	СН	Ephestia spp.
		spp.	B.987	СН	Heliothis spp.
B.960	co	Schizaphis spp.	B.988	СН	Hellula undalis
B.961	co	Trialeurodes spp.	B.989	СН	Keiferia
B.962	co	Lyriomyza spp.			lycopersicella
B.963	co	Oscinella spp.	B.990	СН	Leucoptera scitella
B.964	co	Phorbia spp.	B.991	СН	Lithocollethis spp.
B.965	co	Frankliniella spp.	B.992	СН	Lobesia botrana
B.966	co	Thrips spp.	B.993	СН	Ostrinia nubilalis
B.967	co	Scirtothrips aurantii	B.994	СН	Pandemis spp.
B.968	co	Aceria spp.	B.995	СН	Pectinophora
B.969	co	Aculus spp.			gossyp.
B.970	co	Brevipalpus spp.	B.996	СН	Phyllocnistis citrella
B.971	co	Panonychus spp.	B.997	СН	Pieris spp.
B.972	co	Phyllocoptruta spp.	B.998	СН	Plutella xylostella
B.973	co	Tetranychus spp.	B.999	СН	Scirpophaga spp.
B.974	co	Heterodera spp.	B.1000	СН	Sesamia spp.
B.975	co	Meloidogyne spp.	B.1001	СН	Sparganothis spp.
B.976	СН	Adoxophyes spp.	B.1002	СН	Spodoptera spp.
B.977	СН	Agrotis spp.	B.1003	СН	Tortrix spp.
B.978	СН	Alabama	B.1004	СН	Trichoplusia ni
		argillaceae	B.1005	СН	Agriotes spp.
B.979	СН	Anticarsia	B.1006	СН	Anthonomus
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		Control of		AP	Control of
		grandis	B.1037	СН	Phyliocoptruta spp.
B.1007	СН	Curculio spp.	B.1038	СН	Tetranychus spp.
B.1008	СН	Diabrotica balteata	B.1039	СН	Heterodera spp.
B.1009	СН	Leptinotarsa spp.	B.1040	СН	Meloidogyne spp.
B.1010	СН	Lissorhoptrus spp.	B.1041	SS	Adoxophyes spp.
B.1011	СН	Otiorhynohus spp.	B.1042	SS	Agrotis spp.
B.1012	СН	Aleurothrixus spp.	B.1043	SS	Alabama
B.1013	СН	Aleyrodes spp.			argillaceae
B.1014	СН	Aonidiella spp.	B.1044	SS	Anticarsia
B.1015	СН	Aphididae spp.			gemmatalis
B.1016	СН	Aphis spp.	B.1045	ss	Chilo spp.
B.1017	СН	Bemisia tabaci	B.1046	SS	Clysia ambiguella
B.1018	СН	Empoasca spp.	B.1047	SS	Crocidolomia
B.1019 C	СН	Mycus spp.			binotalis
B.1020	СН	Nephotettix spp.	B.1048	ss	Cydia spp.
B.1021	СН	Nilaparvata spp.	B.1049	ss	Diparopsis
B.1022	СН	Pseudococcus spp.			castanea
B.1023	СН	Psylla spp.	B.1050	ss	Earias spp.
B.1024	СН	Quadraspidiotus	B.1051	SS	Ephestia spp.
		spp.	B.1052	ss	Heliothis spp.
B.1025	СН	Schizaphis spp.	B.1053	SS	Hellula undalis
B.1026	СН	Trialeurodes spp.	B.1054	ss	Keiferia
B.1027	СН	Lyriomyza spp.	:		lycopersicella
B.1028	СН	Oscinella spp.	B.1055	ss	Leucoptera scitella
B.1029	СН	Phorbia spp.	B.1056	SS	Lithocollethis spp.
B.1030	СН	Frankliniella spp.	B.1057	SS	Lobesia botrana
B.1031 (СН	Thrips spp.	B.1058	ss	Ostrinia nubilalis
B.1032	СН	Scirtothrips aurantii	B.1059	SS	Pandemis spp.
B.1033	СН	Aceria spp.	B.1060	SS	Pectinophora
B.1034	СН	Aculus spp.			gossyp.
B.1035	СН	Brevipalpus spp.	B.1061	SS	Phyllocnistis citrella
B.1036	СН	Panonychus spp.	B.1062	SS	Pieris spp.

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	AP	Control of		AP	Control of
B.1063	SS	Plutelia xylostella	B.1093	SS	Oscinella spp.
B.1064	SS	Scirpophaga spp.	B.1094	ss	Phorbia spp.
B.1065	SS	Sesamia spp.	B.1095	SS	Frankliniella spp.
B.1066	ss	Sparganothis spp.	B.1096	ss	Thrips spp.
B.1067	ss	Spodoptera spp.	B.1097	ss	Scirtothrips aurantii
B.1068	SS	Tortrix spp.	B.1098	SS	Aceria spp.
B.1069	SS	Trichoplusia ni	B.1099	SS	Aculus spp.
B.1070	SS	Agriotes spp.	B.1100	ss	Brevipalpus spp.
B.1071	SS	Anthonomus	B.1101	ss	Panonychus spp.
		grandis	B.1102	SS	Phyllocoptruta spp.
B.1072	SS	Curculio spp.	B.1103	SS	Tetranychus spp.
B.1073	SS	Diabrotica balteata	B.1104	SS	Heterodera spp.
B.1074	SS	Leptinotarsa spp.	B.1105	SS	Meloidogyne spp.
B.1075	SS	Lissorhoptrus spp.	B.1106	но	Adoxophyes spp.
B.1076	SS	Otiorhynchus spp.	B.1107	НО	Agrotis spp.
B.1077	SS	Aleurothrixus spp.	B.1108	НО	Alabama
B.1078	SS	Aleyrodes spp.			argillaceae
B.1079	SS	Aonidiella spp.	B.1109	но	Anticarsia
B.1080	SS	Aphididae spp.			gemmatalis
B.1081	SS	Aphis spp.	B.1110	НО	Chilo spp.
B.1082	SS	Bemisia tabaci	B.1111	НО	Clysia ambiguella
B.1083	SS	Empoasca spp.	B.1112	НО	Crocidolomia
B.1084	SS	Mycus spp.			binotalis
B.1085	SS	Nephotettix spp.	B.1113	НО	Cydia spp.
B.1086	SS	Nilaparvata spp.	B.1114	но	Diparopsis
B.1087	SS	Pseudococcus spp.			castanea
B.1088	SS	Psylla spp.	B.1115	НО	Earias spp.
B.1089	SS	Quadraspidiotus	B.1116	НО	Ephestia spp.
		spp.	B.1117	но	Heliothis spp.
B.1090	SS	Schizaphis spp.	B.1118	но	Hellula undalis
B.1091	SS	Trialeurodes spp.	B.1119	но	Keiferia
B.1092	SS	Lyriomyza spp.			lycopersicella

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	AP	Control of		AP	Control of
B.1120	НО	Leucoptera scitella	B.1145	НО	Aphididae spp.
B.1121	но	Lithocollethis spp.	B.1146	но	Aphis spp.
B.1122	НО	Lobesia botrana	B.1147	но	Bemisia tabaci
B.1123	но	Ostrinia nubilalis	B.1148	но	Empoasca spp.
B.1124	но	Pandemis spp.	B.1149	но	Mycus spp.
B.1125	НО	Pectinophora	B.1150	но	Nephotettix spp.
		gossypiella	B.1151	но	Nilaparvata spp.
B.1126	НО	Phyllocnistis citrella	B.1152	НО	Pseudococcus spp.
B.1127	НО	Pieris spp.	B.1153	НО	Psylla spp.
B.1128	НО	Plutella xylostella	B.1154	НО	Quadraspidiotus
B.1129	НО	Scirpophaga spp.			spp.
B.1130	НО	Sesamia spp.	B.1155	НО	Schizaphis spp.
B.1131	НО	Sparganothis spp.	B.1156	НО	Trialeurodes spp.
B.1132	НО	Spodoptera spp.	B.1157	НО	Lyriomyza spp.
B.1133	НО	Tortrix spp.	B.1158	но	Oscinella spp.
B.1134	НО	Trichoplusia ni	B.1159	но	Phorbia spp.
B.1135	НО	Agriotes spp.	B.1160	НО	Frankliniella spp.
B.1136	НО	Anthonomus	B.1161	но	Thrips spp.
		grandis	B.1162	НО	Scirtothrips aurantii
B.1137	НО	Curculio spp.	B.1163	НО	Aceria spp.
B.1138	НО	Diabrotica balteata	B.1164	но	Aculus spp.
B.1139	НО	Leptinotarsa spp.	B.1165	но	Brevipalpus spp.
B.1140	НО	Lissorhoptrus spp.	B.1166	НО	Panonychus spp.
B.1141	НО	Otiorhynchus spp.	B.1167	НО	Phyllocoptruta spp.
B.1142	НО	Aleurothrixus spp.	B.1168	но	Tetranychus spp.
B.1143	но	Aleyrodes spp.	B.1169	но	Heterodera spp.
B.1144	НО	Aonidiella spp.	B.1170	но	Meloidogyne spp.
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Biological Examples

<u>Table 1:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic cotton, wherein the combination of the active principle expressed by the

transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 2:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic rice, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 3:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic potatoes, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 4:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic brassica, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 5:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic tomatoes, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 6:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic cucurbits, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 7:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic soybeans, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 8:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic maize, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 9:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic wheat, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 10:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic bananas, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 11:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic citrus trees, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 12:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic pome fruit trees, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 13:</u> A method of controlling pests comprising the application of thiamethoxam to transgenic peppers, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 14:</u> A method of controlling pests comprising the application of imidacloprid to transgenic cotton, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 15:</u> A method of controlling pests comprising the application of imidacloprid to transgenic rice, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 16:</u> A method of controlling pests comprising the application of imidacloprid to transgenic potatoes, wherein the combination of the active principle expressed by the

transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 17:</u> A method of controlling pests comprising the application of imidacloprid to transgenic tomatoes, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 18:</u> A method of controlling pests comprising the application of imidacloprid to transgenic cucurbits, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 19:</u> A method of controlling pests comprising the application of imidacloprid to transgenic soybeans, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 20:</u> A method of controlling pests comprising the application of imidacloprid to transgenic maize, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table 21: A method of controlling pests comprising the application of imidacloprid to transgenic wheat, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table 22: A method of controlling pests comprising the application of imidacloprid to transgenic bananas, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 23:</u> A method of controlling pests comprising the application of imidacloprid to transgenic orange trees, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table 24: A method of controlling pests comprising the application of imidacloprid to transgenic pome fruit, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 25:</u> A method of controlling pests comprising the application of imidacloprid to transgenic cucurbits, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 26:</u> A method of controlling pests comprising the application of imidacloprid to transgenic peppers, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 27</u>: A method of controlling pests comprising the application of Ti-435 to transgenic cotton, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table 28: A method of controlling pests comprising the application of Ti-435 to transgenic rice, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 29</u>: A method of controlling pests comprising the application of Ti-435 to transgenic potatoes, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 30:</u> A method of controlling pests comprising the application of Ti-435 to transgenic brassica, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 31:</u> A method of controlling pests comprising the application of Ti-435 to transgenic tomatoes, wherein the combination of the active principle expressed by the transgenic plant

and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 32:</u> A method of controlling pests comprising the application of Ti-435 to transgenic cucurbits, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 33:</u> A method of controlling pests comprising the application of Ti-435 to transgenic soybeans, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 34:</u> A method of controlling pests comprising the application of Ti-435 to transgenic maize, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 35:</u> A method of controlling pests comprising the application of Ti-435 to transgenic wheat, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 36:</u> A method of controlling pests comprising the application of Ti-435 to transgenic bananas, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 37:</u> A method of controlling pests comprising the application of Ti-435 to transgenic citrus trees, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 38:</u> A method of controlling pests comprising the application of Ti-435 to transgenic pome fruit trees, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 39:</u> A method of controlling pests comprising the application of thiacloprid to transgenic cotton, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table 40: A method of controlling pests comprising the application of thiacloprid to transgenic rice, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 41:</u> A method of controlling pests comprising the application of thiacloprid to transgenic potatoes, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 42:</u> A method of controlling pests comprising the application of thiacloprid to transgenic brassica, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 43:</u> A method of controlling pests comprising the application of thiacloprid to transgenic tomatoes, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table 44: A method of controlling pests comprising the application of thiacloprid to transgenic cucurbits, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 45:</u> A method of controlling pests comprising the application of thiacloprid to transgenic soybeans, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 46:</u> A method of controlling pests comprising the application of thiacloprid to transgenic maize, wherein the combination of the active principle expressed by the

transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 47:</u> A method of controlling pests comprising the application of thiacloprid to transgenic wheat, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

<u>Table 48</u>: A method of controlling pests comprising the application of thiacloprid to transgenic bananas, wherein the combination of the active principle expressed by the transgenic plant and the pest to be controlled correspond to anyone of the individualised combinations B.1 to B.1170 of table B.

Table C:

Abbreviations:

Acetyl-COA Carboxylase: ACCase

Acetolactate Synthase: ALS

Hydroxyphenylpyruvat dioxygenase: HPPD

Inhibition of protein synthesis: IPS

Hormone mimic: HO

Glutamine Synthetase: GS

Protoporphyrinogen oxidase: PROTOX

5-Enolpyruvyl-3-Phosphoshikimate Synthase: EPSPS

	Principle	Tolerant to	Crop
C.1	ALS	Sulfonylureas etc.***	Cotton
C.2	ALS	Sulfonylureas etc. ***	Rice
C.3	ALS	Sulfonylureas etc. ***	Brassica
C.4	ALS	Sulfonylureas etc. ***	Potatoes
C.5	ALS	Sulfonylureas etc. ***	Tomatoes
C.6	ALS	Sulfonylureas etc. ***	Cucurbits
C.7	ALS	Sulfonylureas etc. ***	Soybeans
C.8	ALS	Sulfonylureas etc. ***	Maize
C.9	ALS	Sulfonylureas etc. ***	Wheat
C.10	ALS	Sulfonylureas etc. ***	pome fruit
	1	l .	i

	Principle	Tolerant to	Crop
C.11	ALS	Sulfonylureas etc. ***	stone fruit
C.12	ALS	Sulfonylureas etc. ***	citrus
C.13	ACCase	+++	Cotton
C.14	ACCase	+++	Rice
C.15	ACCase	+++	Brassica
C.16	ACCase	+++	Potatoes
C.17	ACCase	+++	Tomatoes
C.18	ACCase	+++	Cucurbits
C.19	ACCase	+++	Soybeans
C.20	ACCase	+++	Maize
C.21	ACCase	+++	Wheat
C.22	ACCase	+++	pome fruit
C.23	ACCase	+++	stone fruit
C.24	ACCase	+++	citrus
C.25	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Cotton
C.26	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Rice
C.27	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Brassica
C.28	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Potatoes
C.29	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Tomatoes
C.30	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Cucurbits
C.31	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Soybeans
C.32	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Maize
C.33	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	Wheat
C.34	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	pome fruit
C.35	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	stone fruit
C.36	HPPD	Isoxaflutol, Isoxachlotol, Sulcotrion, Mesotrion	citrus
C.37	Nitrilase	Bromoxynil, loxynil	Cotton
C.38	Nitrilase	Bromoxynil, loxynil	Rice
C .39	Nitrilase	Bromoxynil, loxynil	Brassica
C .40	Nitrilase	Bromoxynil, loxynil	Potatoes
C.41	Nitrilase	Bromoxynil, łoxynil	Tomatoes
C.42	Nitrilase	Bromoxynil, loxynil	Cucurbits
	1	ı	i

C.43 Nitrilase Bromoxynil, loxynil Maize C.44 Nitrilase Bromoxynil, loxynil Maize C.45 Nitrilase Bromoxynil, loxynil Wheat C.46 Nitrilase Bromoxynil, loxynil pome fruit C.47 Nitrilase Bromoxynil, loxynil pome fruit C.48 Nitrilase Bromoxynil, loxynil stone fruit C.49 IPS Chloroactanilides &&& Cotton C.50 IPS Chloroactanilides &&& Rice C.51 IPS Chloroactanilides &&& Potatoes C.52 IPS Chloroactanilides &&& Potatoes C.53 IPS Chloroactanilides &&& Cucurbits C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.56 IPS Chloroactanilides &&& Cucurbits C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& Cotton IPS Chloroactanilides && Cotton C.60 IPS Chloroactanilides && Cotton C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P C.63 HOM 2,4-D, Mecoprop-P C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// C.73 PROTOX Protox inhibitors /// C.74 PROTOX		Principle	Tolerant to	Crop
C.44 Nitrilase C.45 Nitrilase Bromoxynil, loxynil Wheat Wheat C.46 Nitrilase Bromoxynil, loxynil pome fruit stone fruit C.47 Nitrilase Bromoxynil, loxynil stone fruit citrus C.48 Nitrilase Bromoxynil, loxynil citrus C.49 IPS Chloroactaniildes &&& Cotton C.50 IPS Chloroactaniildes &&& Rice C.51 IPS Chloroactaniilde &&& Brassica C.52 IPS Chloroactaniildes &&& Potatoes C.53 IPS Chloroactaniildes &&& Cucurbits C.55 IPS Chloroactaniildes &&& Cucurbits C.57 IPS Chloroactaniildes &&& Cucurbits C.57 IPS Chloroactaniildes &&& Wheat C.58 IPS Chloroactaniildes &&& Wheat C.59 IPS Chloroactaniildes &&& Cottrus C.59 IPS Chloroactaniildes &&& Cottrus C.59 IPS Chloroactaniildes &&& IPS Chloroactaniildes && IP	C.43	Nitrilase	Bromoxynil, loxynil	Soybeans
C.46 Nitrilase Bromoxynil, loxynil stone fruit stone fruit Ps Chloroactanilides &&& Cucurbits C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.57 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& Chloroactanilides && Coloroactanilides && Coloroact	C.44	Nitrilase	Bromoxynil, loxynil	
C.47 Nitrilase Bromoxynil, loxynil stone fruit C.48 Nitrilase Bromoxynil, loxynil citrus C.49 IPS Chloroactanilides && C.50 IPS Chloroactanilides && C.51 IPS Chloroactanilides && C.52 IPS Chloroactanilides && C.53 IPS Chloroactanilides && C.54 IPS Chloroactanilides && C.55 IPS Chloroactanilides && C.55 IPS Chloroactanilides && C.56 IPS Chloroactanilides && C.57 IPS Chloroactanilides && C.58 IPS Chloroactanilides && C.59 IPS Chloroactanilides && C.50 IPS Chloroactanilides & Cotton IPS Chloro	C.45	Nitrilase	Bromoxynil, loxynil	Wheat
C.48 Nitrilase Bromoxynil, loxynil citrus C.49 IPS Chloroactanilides &&& Cotton C.50 IPS Chloroactanilides &&& Rice C.51 IPS Chloroactanilides &&& Brassica C.52 IPS Chloroactanilides &&& Potatoes C.53 IPS Chloroactanilides &&& Tomatoes C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.57 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& Citrus C.59 IPS Chloroactanilides &&& citrus C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P C.63 HOM 2,4-D, Mecoprop-P C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// Cotton	C .46	Nitrilase	Bromoxynil, loxynil	pome fruit
C.49 IPS Chloroactanilides &&& Rice C.50 IPS Chloroactanilides &&& Brassica C.51 IPS Chloroactanilides &&& Brassica C.52 IPS Chloroactanilides &&& Potatoes C.53 IPS Chloroactanilides &&& Tomatoes C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& Itrus C.59 IPS Chloroactanilides &&& Itrus C.60 IPS Chloroactanilides && Itrus C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P C.63 HOM 2,4-D, Mecoprop-P C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// Cotton	C.47	Nitrilase	Bromoxynil, loxynil	stone fruit
C.50 IPS Chloroactanilides &&& Brassica C.51 IPS Chloroactanilides &&& Potatoes C.52 IPS Chloroactanilides &&& Potatoes C.53 IPS Chloroactanilides &&& Tomatoes C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Soybeans C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& IPS C.59 IPS Chloroactanilides &&& Itrus C.59 IPS Chloroactanilides &&& Itrus C.60 IPS Chloroactanilides &&& Itrus C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P C.63 HOM 2,4-D, Mecoprop-P C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// Cotton	C.48	Nitrilase	Bromoxynil, loxynil	citrus
C.51 IPS Chloroactanilide &&&s C.52 IPS Chloroactanilides &&& Potatoes C.53 IPS Chloroactanilides &&& Tomatoes C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Soybeans C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& IPS Chloroactanilides && IPS Chloroactanilides && IPS Chloroactanilides && IPS Chloroactanilides &IPS Chlor	C.49	IPS	Chloroactanilides &&&	Cotton
C.52 IPS Chloroactanilides &&& Potatoes C.53 IPS Chloroactanilides &&& Cucurbits C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Cucurbits C.56 IPS Chloroactanilides &&& Soybeans C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& Ipome fruit C.59 IPS Chloroactanilides &&& Istone fruit C.60 IPS Chloroactanilides &&& Istone fruit C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P C.63 HOM 2,4-D, Mecoprop-P C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// Cotton	C.50	IPS	Chloroactanilides &&&	Rice
C.53 IPS Chloroactanilides &&& Cucurbits C.54 IPS Chloroactanilides &&& Cucurbits C.55 IPS Chloroactanilides &&& Soybeans C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& pome fruit C.59 IPS Chloroactanilides &&& citrus C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P C.63 HOM 2,4-D, Mecoprop-P C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// Cotton	C.51	IPS	Chloroactanilide &&&s	Brassica
C.54 IPS Chloroactanilides &&& Soybeans C.55 IPS Chloroactanilides &&& Soybeans C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Maize C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& pome fruit C.59 IPS Chloroactanilides &&& citrus C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P POtatoes C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Wheat C.69 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.70 HOM 2,4-D, Mecoprop-P Soybeans C.71 HOM 2,4-D, Mecoprop-P Soybeans C.72 HOM 2,4-D, Mecoprop-P Soybeans C.73 PROTOX Protox inhibitors ///	C.52	IPS	Chloroactanilides &&&	Potatoes
C.55 IPS Chloroactanilides &&& Soybeans C.56 IPS Chloroactanilides &&& Maize C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& Wheat C.59 IPS Chloroactanilides &&& pome fruit C.59 IPS Chloroactanilides &&& citrus C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P POtatoes C.64 HOM 2,4-D, Mecoprop-P Tomatoes C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Soybeans C.67 HOM 2,4-D, Mecoprop-P Wheat C.68 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.70 HOM 2,4-D, Mecoprop-P Soybeans C.71 HOM 2,4-D, Mecoprop-P Stone fruit C.72 HOM 2,4-D, Mecoprop-P Stone fruit C.73 PROTOX Protox inhibitors ///	C.53	IPS	Chloroactanilides &&&	Tomatoes
C.56 IPS Chloroactanilides &&& Wheat C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& pome fruit C.59 IPS Chloroactanilides &&& stone fruit C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.64 HOM 2,4-D, Mecoprop-P POtatoes C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Soybeans C.66 HOM 2,4-D, Mecoprop-P Wheat C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.69 HOM 2,4-D, Mecoprop-P Soybeans C.70 HOM 2,4-D, Mecoprop-P Soybeans C.71 HOM 2,4-D, Mecoprop-P Soybeans C.72 HOM 2,4-D, Mecoprop-P Soybeans C.73 PROTOX Protox inhibitors /// Cotton	C.54	IPS	Chloroactanilides &&&	Cucurbits
C.57 IPS Chloroactanilides &&& Wheat C.58 IPS Chloroactanilides &&& pome fruit C.59 IPS Chloroactanilides &&& stone fruit C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P Protatoes C.64 HOM 2,4-D, Mecoprop-P Protatoes C.65 HOM 2,4-D, Mecoprop-P Protatoes C.66 HOM 2,4-D, Mecoprop-P Protatoes C.67 HOM 2,4-D, Mecoprop-P Protatoes C.68 HOM 2,4-D, Mecoprop-P Protatoes C.69 HOM 2,4-D, Mecoprop-P Protatoes C.69 HOM 2,4-D, Mecoprop-P Protatoes C.69 HOM 2,4-D, Mecoprop-P Protatoes C.70 HOM 2,4-D, Mecoprop-P Protatoes C.71 HOM 2,4-D, Mecoprop-P Protatoes C.72 HOM 2,4-D, Mecoprop-P Protatoes C.73 PROTOX Protox inhibitors /// Cotton	C.55	IPS	Chloroactanilides &&&	Soybeans
C.58 IPS Chloroactanilides &&& stone fruit C.59 IPS Chloroactanilides &&& stone fruit C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P POtatoes C.64 HOM 2,4-D, Mecoprop-P POtatoes C.65 HOM 2,4-D, Mecoprop-P POtatoes C.66 HOM 2,4-D, Mecoprop-P POtatoes C.67 HOM 2,4-D, Mecoprop-P POTOMICS C.68 HOM 2,4-D, Mecoprop-P POTOMICS C.69 HOM 2,4-D, Mecoprop-P POTOMICS C.69 HOM 2,4-D, Mecoprop-P POTOMICS C.70 HOM 2,4-D, Mecoprop-P POTOMICS C.71 HOM 2,4-D, Mecoprop-P POTOMICS C.72 HOM 2,4-D, Mecoprop-P POTOMICS C.73 PROTOX Protox inhibitors /// Cotton	C.56	IPS	Chloroactanilides &&&	Maize
C.59 IPS Chloroactanilides &&& stone fruit C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P Brassica C.64 HOM 2,4-D, Mecoprop-P POtatoes C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Wheat C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P Soybeans C.71 HOM 2,4-D, Mecoprop-P Soybeans C.72 HOM 2,4-D, Mecoprop-P Soybeans C.73 PROTOX Protox inhibitors /// Cotton	C.57	IPS	Chloroactanilides &&&	Wheat
C.60 IPS Chloroactanilides &&& citrus C.61 HOM 2,4-D, Mecoprop-P C.62 HOM 2,4-D, Mecoprop-P Rice C.63 HOM 2,4-D, Mecoprop-P Brassica C.64 HOM 2,4-D, Mecoprop-P C.65 HOM 2,4-D, Mecoprop-P C.66 HOM 2,4-D, Mecoprop-P C.67 HOM 2,4-D, Mecoprop-P C.68 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.69 HOM 2,4-D, Mecoprop-P C.70 HOM 2,4-D, Mecoprop-P C.71 HOM 2,4-D, Mecoprop-P C.72 HOM 2,4-D, Mecoprop-P C.73 PROTOX Protox inhibitors /// C.74 Cotton	C.58	IPS	Chloroactanilides &&&	pome fruit
C.61 HOM 2,4-D, Mecoprop-P Cotton C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P Brassica C.64 HOM 2,4-D, Mecoprop-P POtatoes C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Maize C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P Stone fruit C.71 HOM 2,4-D, Mecoprop-P Stone fruit C.72 HOM 2,4-D, Mecoprop-P Stone fruit C.73 PROTOX Protox inhibitors /// Cotton	C.59	IPS	Chloroactanilides &&&	stone fruit
C.62 HOM 2,4-D, Mecoprop-P Brassica C.63 HOM 2,4-D, Mecoprop-P Potatoes C.64 HOM 2,4-D, Mecoprop-P Potatoes C.65 HOM 2,4-D, Mecoprop-P Potatoes C.66 HOM 2,4-D, Mecoprop-P Potatoes C.67 HOM 2,4-D, Mecoprop-P Potatoes C.68 HOM 2,4-D, Mecoprop-P Potatoes C.69 HOM 2,4-D, Mecoprop-P Potatoes C.69 HOM 2,4-D, Mecoprop-P Potatoes C.70 HOM 2,4-D, Mecoprop-P Potatoes C.71 HOM 2,4-D, Mecoprop-P Potatoes C.72 HOM 2,4-D, Mecoprop-P Potatoes C.73 PROTOX Protox inhibitors /// Cotton	C.60	IPS	Chloroactanilides &&&	citrus
C.63 HOM 2,4-D, Mecoprop-P Brassica C.64 HOM 2,4-D, Mecoprop-P POtatoes C.65 HOM 2,4-D, Mecoprop-P Tomatoes C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Maize C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P Soybeans C.71 HOM 2,4-D, Mecoprop-P Soybeans C.72 HOM 2,4-D, Mecoprop-P Stone fruit C.73 PROTOX Protox inhibitors /// Cotton	C.61	ном	2,4-D, Mecoprop-P	Cotton
C.64 HOM 2,4-D, Mecoprop-P Tomatoes C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Maize C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.62	ном	2,4-D, Mecoprop-P	Rice
C.65 HOM 2,4-D, Mecoprop-P Cucurbits C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Maize C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.63	ном	2,4-D, Mecoprop-P	Brassica
C.66 HOM 2,4-D, Mecoprop-P Cucurbits C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Maize C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.64	ном	2,4-D, Mecoprop-P	Potatoes
C.67 HOM 2,4-D, Mecoprop-P Soybeans C.68 HOM 2,4-D, Mecoprop-P Maize C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.65	ном	2,4-D, Mecoprop-P	Tomatoes
C.68 HOM 2,4-D, Mecoprop-P Wheat C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.66	ном	2,4-D, Mecoprop-P	Cucurbits
C.69 HOM 2,4-D, Mecoprop-P Wheat C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.67	НОМ	2,4-D, Mecoprop-P	Soybeans
C.70 HOM 2,4-D, Mecoprop-P pome fruit C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.68	ном	2,4-D, Mecoprop-P	Maize
C.71 HOM 2,4-D, Mecoprop-P stone fruit C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C.69	ном	2,4-D, Mecoprop-P	Wheat
C.72 HOM 2,4-D, Mecoprop-P citrus C.73 PROTOX Protox inhibitors /// Cotton	C .70	ном	2,4-D, Mecoprop-P	pome fruit
C.73 PROTOX Protox inhibitors /// Cotton	C.71	ном	2,4-D, Mecoprop-P	stone fruit
	C.72	ном	2,4-D, Mecoprop-P	citrus
C.74 PROTOX Protox inhibitors /// Rice	C.73	PROTOX	Protox inhibitors ///	Cotton
	C.74	PROTOX	Protox inhibitors ///	Rice

	Principle	Tolerant to	Crop
C.75	PROTOX	Protox inhibitors ///	Brassica
C.76	PROTOX	Protox inhibitors ///	Potatoes
C.77	PROTOX	Protox inhibitors ///	Tomatoes
C.78	PROTOX	Protox inhibitors ///	Cucurbits
C.79	PROTOX	Protox inhibitors ///	Soybeans
C .80	PROTOX	Protox inhibitors ///	Maize
C.81	PROTOX	Protox inhibitors ///	Wheat
C.82	PROTOX	Protox inhibitors ///	pome fruit
C.83	PROTOX	Protox inhibitors ///	stone fruit
C.84	PROTOX	Protox inhibitors ///	citrus
C.85	EPSPS	Glyphosate and /or Sulphosate	Cotton
C.86	EPSPS	Glyphosate and /or Sulphosate	Rice
C.87	EPSPS	Glyphosate and /or Sulphosate	Brassica
C.88	EPSPS	Glyphosate and /or Sulphosate	Potatoes
C.89	EPSPS	Glyphosate and /or Sulphosate	Tomatoes
C .90	EPSPS	Glyphosate and /or Sulphosate	Cucurbits
C .91	EPSPS	Glyphosate and /or Sulphosate	Soybeans
C.92	EPSPS	Glyphosate and /or Sulphosate	Maize
C.93	EPSPS	Glyphosate and /or Sulphosate	Wheat
C .94	EPSPS	Glyphosate and /or Sulphosate	pome fruit
C.95	EPSPS	Glyphosate and /or Sulphosate	stone fruit
C.96	EPSPS	Glyphosate and /or Sulphosate	citrus
C.97	GS	Gluphosinate and /or Bialaphos	Cotton
C.98	GS	Gluphosinate and /or Bialaphos	Rice
C.99	GS	Gluphosinate and /or Bialaphos	Brassica
C.100	GS	Gluphosinate and /or Bialaphos	Potatoes
C.101	GS	Gluphosinate and /or Bialaphos	Tomatoes
C.102	GS	Gluphosinate and /or Bialaphos	Cucurbits
C.103	GS	Gluphosinate and /or Bialaphos	Soybeans
C.104	GS	Gluphosinate and /or Bialaphos	Maize
C.105	GS	Gluphosinate and /or Bialaphos	Wheat
C.106	GS	Gluphosinate and /or Bialaphos	pome fruit

	Principle	Tolerant to	Crop
C.107	GS	Gluphosinate and /or Bialaphos	stone fruit
C.108	GS	Gluphosinate and /or Bialaphos	citrus

*** Included are Sulfonylureas, Imidazolinones, Triazolopyrimidines, Dimethoxypyrimidines and N-Acylsulfonamides:

Sulfonylureas such as Chlorsulfuron, Chlorimuron, Ethamethsulfuron, Metsulfuron, Primisulfuron, Prosulfuron, Triasulfuron, Cinosulfuron, Trifusulfuron, Oxasulfuron, Bensulfuron, Tribenuron, ACC 322140, Fluzasulfuron, Ethoxysulfuron, Fluzasdulfuron, Nicosulfuron, Rimsulfuron, Thifensulfuron, Pyrazosulfuron, Clopyrasulfuron, NC 330, Azimsulfuron, Imazosulfuron, Sulfosulfuron, Amidosulfuron, Flupyrsulfuron, CGA 362622 Imidazolinones such as Imazamethabenz, Imazaquin, Imazamethypyr, Imazethapyr, Imazapyr and Imazamox;

Triazolopyrimidines such as DE 511, Flumetsulam and Chloransulam;

Dimethoxypyrimidines such as Pyrithiobac, Pyriminobac, Bispyribac and Pyribenzoxim.

+++ Tolerant to Diclofop-methyl, Fluazifop-P-butyl, Haloxyfop-P-methyl, Haloxyfop-P-ethyl, Quizalafop-P-ethyl, clodinafop propargyl, fenoxaprop - -ethyl, - Tepraloxydim, Alloxydim, Sethoxydim, Cycloxydim, Cloproxydim, Tralkoxydim, Butoxydim, Caloxydim, Clefoxydim, Clethodim.

&&& Chloroacetanilides such as Alachlor Acetochlor, Dimethenamid

/// Protox inhibitors: For instance diphenyethers such as Acifluorfen, Aclonifen, Bifenox, Chlornitrofen, Ethoxyfen, Fluoroglycofen, Fomesafen, Lactofen, Oxyfluorfen; Imides such as Azafenidin, Carfentrazone-ethyl, Cinidon-ethyl, Flumiclorac-pentyl, Flumioxazin, Fluthiacet-methyl, Oxadiargyl, Oxadiazon, Pentoxazone, Sulfentrazone, Imides and others, such as Flumipropyn, Flupropacil, Nipyraclofen and Thidiazimin; and further Fluazolate and Pyraflufen-ethyl

Biological Examples

<u>Table 49:</u> A method of controlling representatives of the genus Adoxophyes comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the

combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 50:</u> A method of controlling representatives of the genus Agrotis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 51:</u> A method of controlling Alabama argillaceae comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 52: A method of controlling Anticarsia germatalis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 53:</u> A method of controlling representatives of the genus Chilo comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 54:</u> A method of controlling Clysia ambiguella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 55:</u> A method of controlling representatives of the genus Cnephalocrocis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 56: A method of controlling Crocidolomia binotalis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 57:</u> A method of controlling representatives of the genus Cydia comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 58: A method of controlling Diparopsis castanea comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 59:</u> A method of controlling representatives of the genus Earias comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 60:</u> A method of controlling representatives of the genus Ephestia comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 61:</u> A method of controlling representatives of the genus Heliothis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 62:</u> A method of controlling Hellula undalis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 63:</u> A method of controlling Keiferia lycopersicella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 64:</u> A method of controlling Leucoptera scitella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the

active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 65:</u> A method of controlling representatives of the genus Lithocollethis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 66:</u> A method of controlling Lobesia botrana comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 67:</u> A method of controlling Ostrinia nubilalis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 68:</u> A method of controlling representatives of the genus Pandemis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 69</u>: A method of controlling Pectinophora gossypiella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 70:</u> A method of controlling Phyllocnistis citrella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 71:</u> A method of controlling representatives of the genus Pieris comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 72:</u> A method of controlling Plutella xylostella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 73:</u> A method of controlling representatives of the genus Scirpophaga comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 74:</u> A method of controlling representatives of the genus Sesamia comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 75: A method of controlling representatives of the genus Sparganothis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 76:</u> A method of controlling representatives of the genus Spodoptera comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 77:</u> A method of controlling representatives of the genus Tortrix comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 78: A method of controlling Trichoplusia ni comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 79:</u> A method of controlling representatives of the genus Agriotes comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the

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combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 80:</u> A method of controlling Anthonomus grandis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 81:</u> A method of controlling representatives of the genus Curculio comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 82: A method of controlling Diabrotica balteata comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 83:</u> A method of controlling representatives of the genus Leptinotarsa comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 84: A method of controlling representatives of the genus Lissorhoptrus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 85:</u> A method of controlling representatives of the genus Otiorhynchus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 86:</u> A method of controlling representatives of the genus Aleurothrixus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 87:</u> A method of controlling representatives of the genus Aleyrodes comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 88:</u> A method of controlling representatives of the genus Aonidiella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 89: A method of controlling representatives of the family Aphididae comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 90:</u> A method of controlling representatives of the genus Aphis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 91: A method of controlling Bemisia tabaci comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 92:</u> A method of controlling representatives of the genus Empoasca comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 93:</u> A method of controlling representatives of the genus Mycus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 94:</u> A method of controlling representatives of the genus Nephotettix comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the

combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 95:</u> A method of controlling representatives of the genus Nilaparvata comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 96:</u> A method of controlling representatives of the genus Pseudococcus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 97:</u> A method of controlling representatives of the genus Psylla comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 98:</u> A method of controlling representatives of the genus Quadraspidiotus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 99:</u> A method of controlling representatives of the genus Schizaphis comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 100:</u> A method of controlling representatives of the genus Trialeurodes comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 101:</u> A method of controlling representatives of the genus Lyriomyza comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 102:</u> A method of controlling representatives of the genus Oscinella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 103:</u> A method of controlling representatives of the genus Phorbia comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 104:</u> A method of controlling representatives of the genus Frankliniella comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 105</u>: A method of controlling representatives of the genus Thrips comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 106:</u> A method of controlling Scirtothrips aurantii comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 107:</u> A method of controlling representatives of the genus Aceria comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 108:</u> A method of controlling representatives of the genus Aculus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 109</u>: A method of controlling representatives of the genus Brevipalpus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the

combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 110:</u> A method of controlling representatives of the genus Panonychus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 111: A method of controlling representatives of the genus Phyllocoptruta comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 112:</u> A method of controlling representatives of the genus Tetranychus comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 113:</u> A method of controlling representatives of the genus Heterodera comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 114:</u> A method of controlling representatives of the genus Meloidogyne comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 115:</u> A method of controlling Mamestra brassica comprising the application of thiamethoxam to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 116:</u> A method of controlling representatives of the genus Adoxophyes comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 117:</u> A method of controlling representatives of the genus Agrotis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 118:</u> A method of controlling Alabama argillaceae comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 119: A method of controlling Anticarsia gemmatalis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 120:</u> A method of controlling representatives of the genus Chilo comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 121: A method of controlling Clysia ambiguella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 122: A method of controlling representatives of the genus Cnephalocrocis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 123:</u>: A method of controlling Crocidolomia binotalis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 124:</u> A method of controlling representatives of the genus Cydia comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the

combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 125:</u> A method of controlling Diparopsis castanea comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 126: A method of controlling representatives of the genus Earias comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 127:</u> A method of controlling representatives of the genus Ephestia comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 128:</u> A method of controlling representatives of the genus Heliothis of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 129:</u> A method of controlling Hellula undalis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 130:</u> A method of controlling Keiferia lycopersicella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 131:</u> A method of controlling Leucoptera scitella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 132:</u> A method of controlling representatives of the genus Lithocollethis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 133:</u> A method of controlling Lobesia botrana comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 134:</u> A method of controlling Ostrinia nubilalis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 135:</u> A method of controlling representatives of the genus Pandemis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 136:</u> A method of controlling Pectinophora gossypiella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 137:</u> A method of controlling Phyllocnistis citrella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 138: A method of controlling representatives of the genus Pieris comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 139:</u> A method of controlling Plutella xylostella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the

active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 140:</u> A method of controlling representatives of the genus Scirpophaga comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 141:</u> A method of controlling representatives of the genus Sesamia comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 142: A method of controlling representatives of the genus Sparganothis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 143:</u> A method of controlling representatives of the genus Spodoptera comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 144:</u> A method of controlling representatives of the genus Tortrix comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 145:</u> A method of controlling Trichoplusia ni comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 146:</u> A method of controlling representatives of the genus Agriotes comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 147: A method of controlling Anthonomus grandis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 148: A method of controlling representatives of the genus Curculio comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 149: A method of controlling Diabrotica balteata comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 150:</u> A method of controlling representatives of the genus Leptinotarsa comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 151:</u> A method of controlling representatives of the genus Lissorhoptrus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 152: A method of controlling representatives of the genus Otiorhynchus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 153: A method of controlling representatives of the genus Aleurothrixus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 154:</u> A method of controlling representatives of the genus Aleyrodes comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the

combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 155:</u> A method of controlling representatives of the genus Aonidiella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 156:</u> A method of controlling representatives of the family Aphididae comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 157:</u> A method of controlling representatives of the genus Aphis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 158:</u> A method of controlling Bemisia tabaci comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 159: A method of controlling representatives of the genus Empoasca comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 160:</u> A method of controlling representatives of the genus Mycus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 161:</u> A method of controlling representatives of the genus Nephotettix comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 162:</u> A method of controlling representatives of the genus Nilaparvata comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 163:</u> A method of controlling representatives of the genus Pseudococcus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 164: A method of controlling representatives of the genus Psylla comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 165:</u> A method of controlling representatives of the genus Quadraspidiotus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 166:</u> A method of controlling representatives of the genus Schizaphis comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 167:</u> A method of controlling representatives of the genus Trialeurodes comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 168:</u> A method of controlling representatives of the genus Lyriomyza comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 169</u>: A method of controlling representatives of the genus Oscinella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the

combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 170:</u> A method of controlling representatives of the genus Phorbia comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 171:</u> A method of controlling representatives of the genus Frankliniella comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 172:</u> A method of controlling representatives of the genus Thrips comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 173:</u> A method of controlling Scirtothrips aurantii comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 174:</u> A method of controlling representatives of the genus Aceria comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 175:</u> A method of controlling representatives of the genus Aculus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 176:</u> A method of controlling representatives of the genus Brevipalpus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 177:</u> A method of controlling representatives of the genus Panonychus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 178:</u> A method of controlling representatives of the genus Phyllocoptruta comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 179:</u> A method of controlling representatives of the genus Tetranychus comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 180:</u> A method of controlling representatives of the genus Heterodera comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 181:</u> A method of controlling representatives of the genus Meloidogyne comprising the application of imidacloprid to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 182:</u> A method of controlling representatives of the genus Adoxophyes comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 183:</u> A method of controlling representatives of the genus Agrotis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 184:</u> A method of controlling Alabama argillaceae comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle

expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 185:</u> A method of controlling Anticarsia germatalis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 186:</u> A method of controlling representatives of the genus Chilo comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 187: A method of controlling Clysia ambiguella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 188:</u> A method of controlling Crocidolomia binotalis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 189:</u> A method of controlling representatives of the genus Cydia comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 190:</u> A method of controlling Diparopsis castanea comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 191:</u> A method of controlling representatives of the genus Earias comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 192:</u> A method of controlling representatives of the genus Ephestia comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against

the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 193:</u> A method of controlling representatives of the genus Heliothis of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 194:</u> A method of controlling Hellula undalis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 195: A method of controlling Keiferia lycopersicella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 196: A method of controlling Leucoptera scitella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 197:</u> A method of controlling representatives of the genus Lithocollethis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 198</u>: A method of controlling Lobesia botrana comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 199:</u> A method of controlling Ostrinia nubilalis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle

expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

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<u>Table 200:</u> A method of controlling representatives of the genus Pandemis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 201:</u> A method of controlling Pectinophora gossypiella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 202:</u> A method of controlling Phyllocnistis citrella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 203:</u> A method of controlling representatives of the genus Pieris comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 204:</u> A method of controlling Plutella xylostella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 205:</u> A method of controlling representatives of the genus Scirpophaga comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 206:</u> A method of controlling representatives of the genus Sesamia comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 207:</u> A method of controlling representatives of the genus Sparganothis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 208</u>: A method of controlling representatives of the genus Spodoptera comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 209:</u> A method of controlling representatives of the genus Tortrix comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 210:</u> A method of controlling Trichoplusia ni comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 211:</u> A method of controlling representatives of the genus Agriotes comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 212:</u> A method of controlling Anthonomus grandis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 213: A method of controlling representatives of the genus Curculio comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 214:</u> A method of controlling Diabrotica balteata comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle

expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 215:</u> A method of controlling representatives of the genus Leptinotarsa comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 216:</u> A method of controlling representatives of the genus Lissorhoptrus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 217:</u> A method of controlling representatives of the genus Otiorhynchus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 218:</u> A method of controlling representatives of the genus Aleurothrixus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 219:</u> A method of controlling representatives of the genus Aleyrodes comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 220:</u> A method of controlling representatives of the genus Aonidiella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 221:</u> A method of controlling representatives of the family Aphididae comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 222:</u> A method of controlling representatives of the genus Aphis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 223:</u> A method of controlling Bemisia tabaci comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 224:</u> A method of controlling representatives of the genus Empoasca comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 225:</u> A method of controlling representatives of the genus Mycus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 226:</u> A method of controlling representatives of the genus Nephotettix comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 227:</u> A method of controlling representatives of the genus Nilaparvata comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 228:</u> A method of controlling representatives of the genus Pseudococcus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 229:</u> A method of controlling representatives of the genus Psylla comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of

the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 230:</u> A method of controlling representatives of the genus Quadraspidiotus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 231:</u> A method of controlling representatives of the genus Schizaphis comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 232:</u> A method of controlling representatives of the genus Trialeurodes comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 233:</u> A method of controlling representatives of the genus Lyriomyza comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 234:</u> A method of controlling representatives of the genus Oscinella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 235:</u> A method of controlling representatives of the genus Phorbia comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 236:</u> A method of controlling representatives of the genus Frankliniella comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

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<u>Table 237:</u> A method of controlling representatives of the genus Thrips comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 238: A method of controlling Scirtothrips aurantii comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 239:</u> A method of controlling representatives of the genus Aceria comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 240:</u> A method of controlling representatives of the genus Aculus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 241:</u> A method of controlling representatives of the genus Brevipalpus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 242: A method of controlling representatives of the genus Panonychus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 243:</u> A method of controlling representatives of the genus Phyllocoptruta comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Table 244: A method of controlling representatives of the genus Tetranychus comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination

of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 245</u>: A method of controlling representatives of the genus Heterodera comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 246:</u> A method of controlling representatives of the genus Meloidogyne comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

<u>Table 247:</u> A method of controlling Mamestra brassica comprising the application of Ti-435 to a herbicidally resistant transgenic crop, wherein the combination of the active principle expressed by the transgenic plant and the crop to be protected against the pest correspond to anyone of the lines C.1 to C.108 of table C.

Example B1: Action against Anthonomus grandis adults, Spodoptera littoralis or Heliothis virescens

Young transgenic cotton plants which express the δ-endotoxin CryllIA are sprayed with an aqueous emulsion spray mixture comprising 100, 50, 10, 5, 1 ppm of imidacloprid respectively. After the spray coating has dried on, the cotton plants are populated with 10 adult Anthonomus grandis, 10 Spodoptera littoralis larvae or 10 Heliothis virescens larvae respectively and introduced into a plastic container. Evaluation takes place 3 to 10 days later. The percentage reduction in population, or the percentage reduction in feeding damage (% action), is determined by comparing the number of dead beetles and the feeding damage on the transgenic cotton plants with that of non-transgenic cotton plants which have been treated with an emulsion spray mixture comprising imidacloprid and conventional CryllIA-toxin at a concentration of in each case 100, 50, 10, 5, 1 ppm respectively.

In this test, the control of the tested insects in the transgenic plant is superior to the control on the non-transgenic plant.

Example B2: Action against Anthonomus grandis adults, Spodoptera littoralis or Heliothis virescens

Young transgenic cotton plants which express the δ-endotoxin CryIIIA are sprayed with an aqueous emulsion spray mixture comprising 100, 50, 10, 5, 1 ppm of thiamethoxam respectively. After the spray coating has dried on, the cotton plants are populated with 10 adult Anthonomus grandis, 10 Spodoptera littoralis larvae or 10 Heliothis virescens larvae respectively and introduced into a plastic container. Evaluation takes place 3 to 10 days later. The percentage reduction in population, or the percentage reduction in feeding damage (% action), is determined by comparing the number of dead beetles and the feeding damage on the transgenic cotton plants with that of non-transgenic cotton plants which have been treated with an emulsion spray mixture comprising thiamethoxam and conventional CryIIIA-toxin at a concentration of in each case 100, 50, 10, 5, 1 ppm respectively. In this test, the control of the tested insects in the transgenic plant is superior, while it is insufficient in the non-transgenic plant.

Example B3: Action against Anthonomus grandis adults, Spodoptera littoralis or Heliothis virescens

Young transgenic cotton plants which express the δ-endotoxin CryIIIA are sprayed with an aqueous emulsion spray mixture comprising 100, 50, 10, 5, 1 ppm of Ti-435 respectively. After the spray coating has dried on, the cotton plants are populated with 10 adult Anthonomus grandis, 10 Spodoptera littoralis larvae or 10 Heliothis virescens larvae respectively and introduced into a plastic container. Evaluation takes place 3 to 10 days later. The percentage reduction in population, or the percentage reduction in feeding damage (% action), is determined by comparing the number of dead beetles and the feeding damage on the transgenic cotton plants with that of non-transgenic cotton plants which have been treated with an emulsion spray mixture comprising Ti-435 and conventional CryIIIA-toxin at a concentration of in each case 100, 50, 10, 5, 1 ppm respectively. In this test, the control of the tested insects in the transgenic plant is superior, while it is insufficient in the non-transgenic plant.

Example B4: Action against Anthonomus grandis adults, Spodoptera littoralis or Heliothis virescens

Young transgenic cotton plants which express the δ -endotoxin Cryla(c) are sprayed with an aqueous emulsion spray mixture comprising 100, 50, 10, 5, 1 ppm of Ti-435 respectively. After the spray coating has dried on, the cotton plants are populated with 10 adult Anthonomus grandis, 10 Spodoptera littoralis larvae or 10 Heliothis virescens larvae

respectively and introduced into a plastic container. Evaluation takes place 3 to 10 days later. The percentage reduction in population, or the percentage reduction in feeding damage (% action), is determined by comparing the number of dead beetles and the feeding damage on the transgenic cotton plants with that of non-transgenic cotton plants which have been treated with an emulsion spray mixture comprising Ti-435 and conventional CrylllA-toxin at a concentration of in each case 100, 50, 10, 5, 1 ppm respectively.

In this test, the control of the tested insects in the transgenic plant is superior, while it is insufficient in the non-transgenic plant.

Example B5: Action against Anthonomus grandis adults, Spodoptera littoralis or Heliothis virescens

Young transgenic cotton plants which express the δ-endotoxin Cryla(c) are sprayed with an aqueous emulsion spray mixture comprising 100, 50, 10, 5, 1 ppm of thiamethoxam respectively. After the spray coating has dried on, the cotton plants are populated with 10 adult Anthonomus grandis, 10 Spodoptera littoralis larvae or 10 Heliothis virescens larvae respectively and introduced into a plastic container. Evaluation takes place 3 to 10 days later. The percentage reduction in population, or the percentage reduction in feeding damage (% action), is determined by comparing the number of dead beetles and the feeding damage on the transgenic cotton plants with that of non-transgenic cotton plants which have been treated with an emulsion spray mixture comprising thiamethoxam and conventional CryllIA-toxin at a concentration of in each case 100, 50, 10, 5, 1 ppm respectively.

In this test, the control of the tested insects in the transgenic plant is superior, while it is insufficient in the non-transgenic plant.

Example B6: Action against Anthonomus grandis adults, Spodoptera littoralis or Heliothis virescens

Young transgenic cotton plants which express the δ-endotoxin Cryla(c) are sprayed with an aqueous emulsion spray mixture comprising 100, 50, 10, 5, 1 ppm of imidacloprid respectively. After the spray coating has dried on, the cotton plants are populated with 10 adult Anthonomus grandis, 10 Spodoptera littoralis larvae or 10 Heliothis virescens larvae respectively and introduced into a plastic container. Evaluation takes place 3 to 10 days later. The percentage reduction in population, or the percentage reduction in feeding damage (% action), is determined by comparing the number of dead beetles and the feeding damage on the transgenic cotton plants with that of non-transgenic cotton plants

which have been treated with an emulsion spray mixture comprising imidacloprid conventional CrylllA-toxin at a concentration of in each case 100, 50, 10, 5, 1 ppm respectively. In this test, the control of the tested insects in the transgenic plant is superior, while it is insufficient in the non-transgenic plant.

Example B7: Action against Ostrinia nubilalis, Spodoptera spp. or Heliothis spp.

A plot (a) planted with maize cv. KnockOut® and an adjacent plot (b) of the same size which is planted with conventional maize, both showing natural infestation with Ostrinia nubilalis, Spodoptera spp. or Heliothis, are sprayed with an aqueous emulsion spray mixture comprising 200, 100, 50, 10, 5, 1ppm of Ti-435. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 200, 100, 50, 10, 5, 1 ppm of the endotoxin expressed by KnockOut®. Evaluation takes place 6 days later. The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b).

Improved control of <u>Ostrinia nubilalis</u>, <u>Spodoptera spp. or Heliothis</u> is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B8: Action against Ostrinia nubilalis, Spodoptera spp. or Heliothis spp.

A plot (a) planted with maize cv. KnockOut® and an adjacent plot (b) of the same size which is planted with conventional maize, both showing natural infestation with Ostrinia nubilalis, Spodoptera spp. or Heliothis, are sprayed with an aqueous emulsion spray mixture comprising 200, 100, 50, 10, 5, 1ppm of thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 200, 100, 50, 10, 5, 1 ppm of the endotoxin expressed by KnockOut®. Evaluation takes place 6 days later. The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b).

Improved control of Ostrinia nubilalis, Spodoptera spp. or Heliothis is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B9: Action against Ostrinia nubilalis, Spodoptera spp. or Heliothis spp.

A plot (a) planted with maize cv. KnockOut® and an adjacent plot (b) of the same size which is planted with conventional maize, both showing natural infestation with Ostrinia nubilalis, Spodoptera spp. or Heliothis, are sprayed with an aqueous emulsion spray mixture

comprising 200, 100, 50, 10, 5, 1ppm of imidacloprid. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 200, 100, 50, 10, 5, 1 ppm of the endotoxin expressed by KnockOut®. Evaluation takes place 6 days later. The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b).

Improved control of Ostrinia nubilalis, Spodoptera spp. or Heliothis spp. is observed on the plants of plot (a), while plot (b) snows a control level of not over 60%.

Example B10: Action against Diabrotica balteata

A plot (a) planted with maize seedlings cv. KnockOut® and an adjacent plot (b) of the same size which is planted with conventional maize are sprayed with an aqueous emulsion of a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the endotoxin expressed by KnockOut®. After the spray coating has dried on, the seedlings are populated with 10 Diabrotica balteata larvae in the second stage and transferred to a plastic container. The test is evaluated 6 days later. The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b).

Improved control of <u>Diabrotica balteata</u> is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B11: Action against Aphis gossypii

Cotton seedlings on a plot (a) expressing the δ -endotoxin Cryllla on a plot (a) and conventional cotton seedlings on a plot (b) are infected with Aphis gossypi and subsequently sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin Cryllla. The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 3 and 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of Aphis gossypi is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B12: Action against Frankliniella occidentalis

Cotton seedlings expressing the δ -endotoxin Cryllla on a plot (a) and conventional cotton seedlings on a plot (b) are infected with Frankliniella occidentalis and subsequently sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin Cryllla. The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 3 and 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of <u>Frankliniella occidentalis</u> is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B13: Action against Aphis gossypii

Cotton seedlings expressing the δ -endotoxin CryIA(c) on a plot (a) and conventional cotton seedlings on a plot (b) are infected with Aphis gossypii and subsequently sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin CryIIIa. The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 3 and 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of Aphis gossypii is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B14: Action against Frankliniella occidentalis

Cotton seedlings expressing the δ -endotoxin Cryla(c) on a plot (a) and conventional cotton seedlings on a plot (b) are infected with Frankliniella occidentalis and subsequently sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin Cryla(c). The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 3 and 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of

<u>Frankliniella occidentalis</u> is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B15: Action against Nephotettix cincticeps

Rice plants on a plot (a) expressing the δ -endotoxin CrylA(b) and conventional rice plants on a plot (b) are sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin CrylA(b). After the spray coating has dried on, the plants are infected with Nephotettix cincticeps of the 2nd and 3rd stages. The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 21 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of Nephotettix cincticeps is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B16: Action against Nephotettix cincticeps (systemic)

Rice plants expressing the δ -endotoxin Cryla(b) are planted in a in pot (A) and conventional ice plants are planted in a pot (B). Pot (A) is placed in an aqueous emulsion containing 400 ppm thiamethoxam, whereas plot (B) is placed in a pot containing 400 ppm thiamethoxam and 400 ppm of the δ -endotoxin Cryl(b). The plants are subsequently infected with Nephotettix cincticeps larvae of the second and third stage. The test is evaluated after 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of pot (A) with that on the plants of pot (B). Improved control of Nephotettix cincticeps is observed on the plants of pot (A), while pot (B) shows a control level of not over 60%.

Example B17: Action against Nilaparvata lugens

Rice plants on a plot (a) expressing the δ -endotoxin CrylA(b) and conventional rice plants on a plot (b) are infected with <u>Nilaparvata lugens</u>, subsequently sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin CrylA(b). The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 21 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of Nilaparvata lugens is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B18: Action against Nilaparvata lugens (systemic)

Rice plants expressing the δ -endotoxin CrylA(b) are planted in a in pot (A) and conventional rice plants are planted in a pot (B). Pot (A) is placed in an aqueous emulsion containing 400 ppm thiamethoxam, whereas plot (B) is place in a pot copntaining 400 ppm thiamethoxam and 400 ppm of the δ -endotoxin CrylA(b). The plants are subsequently infected with Nilaparvata lugens larvae of the second and third stage. The test is evaluated after 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of pot (A) with that on the plants of pot (B). Improved control of Nephotettix cincticeps is observed on the plants of pot (A), while pot (B) shows a control level of not over 60%.

Example B19: Action against Nephotettix cincticeps

Rice plants on a plot (a) expressing the δ -endotoxin CrylA(c) and conventional rice plants on a plot (b) are sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin CrylA(c). After the spray coating has dried on, the plants are infected with Nephotettix cincticeps of the 2nd and 3rd stages. The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 21 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of Nephotettix cincticeps is observed on the plants of plot (a), while plot (b) shows a control level of not over 60%.

Example B20: Action against Nephotettix cincticeps (systemic)

Rice plants expressing the δ -endotoxin Cryla(c) are planted in a in pot (A) and conventional ice plants are planted in a pot (B). Pot (A) is placed in an aqueous emulsion containing 400 ppm thiamethoxam, whereas plot (B) is placed in a pot containing 400 ppm thiamethoxam and 400 ppm of the δ -endotoxin Cryl(c). The plants are subsequently infected with

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Nephotettix cincticeps larvae of the second and third stage. The test is evaluated after 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of pot (A) with that on the plants of pot (B). Improved control of Nephotettix cincticeps is observed on the plants of pot (A), while pot (B) shows a control level of not over 60%.

Example B21: Action against Nilaparvata lugens

Rice plants on a plot (a) expressing the δ -endotoxin CrylA(c) and conventional rice plants on a plot (b) are infected with <u>Nilaparvata lugens</u>, subsequently sprayed with a spray mixture comprising 400 ppm thiamethoxam. Immediately afterwards, plot (b) is treated with an emulsion spray mixture comprising 400 ppm of the δ -endotoxin CrylA(c). The seedlings of plot (a) and (b) are then incubated at 20°C. The test is evaluated after 21 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of plot (a) with that on the plants of plot (b). Improved control of <u>Nilaparvata lugens</u> is observed on the plants of plot (a), while plot (b) shows a control level of not over 0%.

Example B22: Action against Nilaparvata lugens (systemic)

Rice plants expressing the δ -endotoxin CrylA(c) are planted in a in pot (A) and conventional rice plants are planted in a pot (B). Pot (A) is placed in an aqueous emulsion containing 400 ppm thiamethoxam, whereas plot (B) is place in a pot copntaining 400 ppm thiamethoxam and 400 ppm of the δ -endotoxin CrylA(c). The plants are subsequently infected with Nilaparvata lugens larvae of the second and third stage. The test is evaluated after 6 days.

The percentage reduction in population (% action) is determined by comparing the number of dead pests on the plants of pot (A) with that on the plants of pot (B). Improved control of Mephotettix cincticeps is observed on the plants of pot (A), while pot (B) shows a control level of not over 60 %.

Patent claims:

- 1. Method of controlling pests in crops of transgenic useful plants, characterized in that a pesticidal composition comprising a nitroimino- or nitroguanidino-compound in free form or in agrochemically useful salt form as active ingredient and at least one auxiliary is applied to the pests or their environment.
- 2. Method according to claim 1, characterized in that thiamethoxam is employed.
- 3. Method according to claim 1, characterized in that imidacloprid is employed.
- 4. Method according to claim 1, characterized in that the transgenic plant is treated.
- 5. Method according to any one of claims 1 to 4, characterized in that the transgenic crop of useful plants is maize.
- 6. Method according to any one of claims 1 to 4, characterized in that the transgenic crop of useful plants is soya beans.
- 7. Method according to claim 4, characterized in that the propagation material of the transgenic useful plant is treated.

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. CLASSIFICATION OF SUBJECT MATTER PC 6 A01N51/00 A01N //(A01N51/00,63:02,63:00),(A01N47/40, IPC 6 A01N47/40 63:02.63:00) According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) A01N IPC 6 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. Υ WO 97 45017 A (UNIROYAL CHEM CO INC) 1-7 4 December 1997 see page 1, line 4 - line 9 see page 2, line 13 - line 17 see page 3, line 9 - page 5, line 10 see page 7, line 9 - line 18 see page 9, line 10 - line 21 Υ WO 96 28023 A (ABBOTT LAB) 1 - 719 September 1996 see page 1, paragraph 1 see page 3, paragraph 3 see page 11, paragraph 3 Υ EP 0 677 247 A (BAYER AG) 18 October 1995 1 - 7see page 2, line 25 - page 9, line 33 Χ Further documents are listed in the continuation of box C. lχ Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docu ments, such combination being obvious to a person skilled other means "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 14 May 1999 27/05/1999 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Lamers, W

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